

# **MISSOURI SOUTHERN STATE COLLEGE CATALOG**



**1973-74**

# CALENDAR FOR 1973

JANUARY	FEBRUARY	MARCH	APRIL
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4 5 6	1 2 3	1 2 3	1 2 3 4 5 6 7
7 8 9 10 11 12 13	4 5 6 7 8 9 10	4 5 6 7 8 9 10	8 9 10 11 12 13 14
14 15 16 17 18 19 20	11 12 13 14 15 16 17	11 12 13 14 15 16 17	15 16 17 18 19 20 21
21 22 23 24 25 26 27	18 19 20 21 22 23 24	18 19 20 21 22 23 24	22 23 24 25 26 27 28
28 29 30 31	25 26 27 28	25 26 27 28 29 30 31	29 30
MAY	JUNE	JULY	AUGUST
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4 5	1 2	1 2 3 4 5 6 7	1 2 3 4
6 7 8 9 10 11 12	3 4 5 6 7 8 9	8 9 10 11 12 13 14	5 6 7 8 9 10 11
13 14 15 16 17 18 19	10 11 12 13 14 15 16	15 16 17 18 19 20 21	12 13 14 15 16 17 18
20 21 22 23 24 25 26	17 18 19 20 21 22 23	22 23 24 25 26 27 28	19 20 21 22 23 24 25
27 28 29 30 31	24 25 26 27 28 29 30	29 30 31	26 27 28 29 30 31
SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1	1 2 3 4 5 6	1 2 3	1
2 3 4 5 6 7 8	7 8 9 10 11 12 13	4 5 6 7 8 9 10	2 3 4 5 6 7 8
9 10 11 12 13 14 15	14 15 16 17 18 19 20	11 12 13 14 15 16 17	9 10 11 12 13 14 15
16 17 18 19 20 21 22	21 22 23 24 25 26 27	18 19 20 21 22 23 24	16 17 18 19 20 21 22
23 24 25 26 27 28 29	28 29 30 31	25 26 27 28 29 30	23 24 25 26 27 28 29
30			30 31

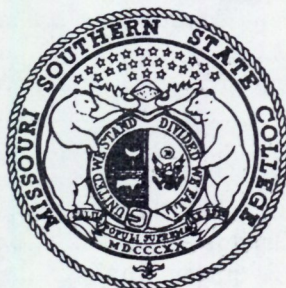
# CALENDAR FOR 1974

JANUARY	FEBRUARY	MARCH	APRIL
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4 5	1 2	1 2	1 2 3 4 5 6
6 7 8 9 10 11 12	3 4 5 6 7 8 9	3 4 5 6 7 8 9	7 8 9 10 11 12 13
13 14 15 16 17 18 19	10 11 12 13 14 15 16	10 11 12 13 14 15 16	14 15 16 17 18 19 20
20 21 22 23 24 25 26	17 18 19 20 21 22 23	17 18 19 20 21 22 23	21 22 23 24 25 26 27
27 28 29 30 31	24 25 26 27 28	24 25 26 27 28 29 30	28 29 30
MAY	JUNE	JULY	AUGUST
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4	1	1 2 3 4 5 6	1 2 3
5 6 7 8 9 10 11	2 3 4 5 6 7 8	7 8 9 10 11 12 13	4 5 6 7 8 9 10
12 13 14 15 16 17 18	9 10 11 12 13 14 15	14 15 16 17 18 19 20	11 12 13 14 15 16 17
19 20 21 22 23 24 25	16 17 18 19 20 21 22	21 22 23 24 25 26 27	18 19 20 21 22 23 24
26 27 28 29 30 31	23 24 25 26 27 28 29	28 29 30 31	25 26 27 28 29 30 31
SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4 5 6 7	1 2 3 4 5	1 2	1 2 3 4 5 6 7
8 9 10 11 12 13 14	6 7 8 9 10 11 12	3 4 5 6 7 8 9	8 9 10 11 12 13 14
15 16 17 18 19 20 21	13 14 15 16 17 18 19	10 11 12 13 14 15 16	15 16 17 18 19 20 21
22 23 24 25 26 27 28	20 21 22 23 24 25 26	17 18 19 20 21 22 23	22 23 24 25 26 27 28
29 30	27 28 29 30 31	24 25 26 27 28 29 30	29 30 31



# Missouri Southern State College

JOPLIN, MISSOURI



OFFERING BACCALAUREATE  
AND ASSOCIATE DEGREES

CATALOG OF  
General Information and  
Announcement of Courses

1973 - 1974

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# FOREWORD

This catalog presents general information, requirements for admission and graduation, and course offerings for the academic year 1973-74, beginning June 1, 1973. The register of administrative officers and instructors is for the 1972-73 year. The College reserves the right to amend regulations and change fees when necessary.

The college is guided by and observes the principle that there shall be no difference in the treatment of persons because of race, creed, color, or national origin.

## **CORRESPONDENCE DIRECTORY MISSOURI SOUTHERN STATE COLLEGE JOPLIN, MISSOURI 64801 Telephone: Area 417 624-8100**

Admission of students .....	Director of Admissions
Alumni affairs .....	Director of Alumni Affairs
Athletic activities.....	Director of Athletics
Business affairs and purchases.....	Director of Financial Affairs
Catalog and bulletins.....	Director of Admissions
Credit evaluation and transcripts.....	Registrar
Employment, on campus (student part-time).....	Office of Financial Aids
Evening session .....	Coordinator of Evening Session
Faculty appointments.....	Dean of the College
Financial aids .....	Office of Financial Aids
Gifts and annuities.....	President
Housing.....	Director of Housing
Loans.....	Office of Financial Aids
Orientation.....	Dean of Men, Dean of Women
Placement services .....	Director of Placement Services
Public information .....	Director of Public Information
Student organizations .....	Dean of Men, Dean of Women
Summer session .....	Dean of the College
Testing and counseling ...	Director of Guidance and Counseling
Veterans affairs.....	Office of Financial Aids

# COLLEGE CALENDAR 1973 - 1974

## SUMMER SESSION—1973

May 31 (6:30 p.m.—8:00 p.m.)	Evening Registration
June 1 (8:30 a.m.—4:00 p.m.)	Day Registration
June 4	Classes Begin
June 8	Last Day for Class Changes and Late Registration
June 22	Withdrawal After This Date No Refund of Fees
July 4	(one day only) 4th of July Holiday
July 11	Last Day to Drop Courses with "W"
July 27	Summer Session Ends
July 28 (3:00 p.m.)	Commencement

### FIRST SEMESTER—1973-1974

August 20-21	Faculty Study Conference
August 22-23-24	Day Registration
August 23	Evening Registration
August 27	Classes Begin
August 31	Last Day for Class Changes
September 3	Labor Day Holiday
September 21	Withdrawal After This Date No Refund of Fees
October 6	Homecoming
October 19	Midsemester (D & F Grades are Due, Friday, October 19 by 5:00 p.m.)
November 15	Last Day to Drop Courses with "W"
November 16	Forensic Tournament (No Classes 3:00—5:00 p.m.)
November 21 (after last class, day and evening)	Dismissal for Thanksgiving
November 26	Classes Resume
December 19	End of First Semester

## SECOND SEMESTER—1973-1974

January 7-8.....	Faculty Conference
January 9-10-11.....	Day Registration
January 10 (6:30 p.m.—8:00 p.m.).....	Evening Registration
January 14.....	Classes Begin
January 18.....	Last Day for Class Changes
February 8.....	Withdrawal After This Date No Refund of Fees
February 18.....	Washington's Birthday Holiday
March 8...Midsemester (D & F Grades Due by 5:00 p.m. Friday, March 8)	
March 11-15.....	Spring Vacation
March 18.....	Classes Resume
March 29-30.....	Music Festival—No Classes
April 12.....	Last Day to Drop Courses with "W"
May 15.....	Classes End
May 18.....	Commencement (7:00 p.m.) End of Semester

## SUMMER SESSION—1974

May 30 (6:30 p.m.—8:00 p.m.)	Evening Registration
May 31 (8:30 a.m.—4:00 p.m.)	Day Registration
June 3	Classes Begin
June 7	Last Day for Class Changes and Late Registration
June 21	Withdrawal After This Date No Refund of Fees
July 4 (one day only)	4th of July Holiday
July 10	Last Day to Drop Courses with “W”
July 26	Summer Session Ends
July 27 (3:00 p.m.)	Commencement



# **MISSOURI SOUTHERN STATE COLLEGE**

**1973-1974**

## **BOARD OF REGENTS**

Fred Hughes, President 1975  
Thomas E. Taylor, Vice-President 1974  
\*Elvin Ummel, Secretary  
Mills H. Anderson 1976  
Norval M. Matthews 1977  
Jerry E. Wells 1973

## **BOARD OF TRUSTEES**

Fred Hughes, President 1976  
Elvin Ummel, Vice-President 1978  
Norval M. Matthews, Secretary 1974  
Jerry E. Wells 1974  
Thomas E. Taylor 1976  
Arthur Kungle, Sr. 1978

**\*Appointed by Board of Regents**

## ADMINISTRATIVE STAFF

Leon C. Billingsly.....	President
Edward S. Phinney.....	Dean of the College
Fred Cinotto.....	Administrative Assistant
Paul R. Shipman.....	Administrative Assistant

and Director of Business Operations

James K. Maupin.....Associate Dean for Technology  
Harold Cooper.....Chairman, Division of Arts and Sciences  
L. Keith Larimore.....Chairman, Division of  
Business Administration

## Business Administration

Charles F. Niess..... Chairman, Division of  
Education and Psychology  
Director of Teacher Education

## Director of Teacher Education

George H. Volmert.....Registrar  
W. Ralph Winton.....Director of Admissions

## Director of Admissions

Floyd E. Belk.....Director of Student Personnel Services  
and Assistant Dean of the College

and Assistant Dean of the College

Glenn D. Dolence ..... Dean of Men  
Linda C. Hill..... Dean of Women

Dean of Women

Eugene C. Mouser..... Director of Guidance and Counseling  
Larry K. Karst.....Counselor

.....Counselor

Ronald E. Rhea.....Veterans Counselor  
Lloyd L. Dryer.....College Psychologist

College Psychologist

Richard D. Humphrey.....Director of Aids and Awards  
Irma J. Hartley.....College Nurse

..... College Nurse

Dudley F. Stegge..... Director of College Union  
Glenn D. Dolence..... Director of Athletics

..... Director of Athletics

Elmer E. Rodgers.....Head Librarian  
Ross C. Snyder.....Director of Instructional Media

Head Librarian

L. Kathleen Kane..... Circulation Librarian  
Arlene E. Moore..... Reference Librarian

## Director of Instructional Media

Elizabeth J. Mueller..... Processing Librarian  
Mary Lou Dove..... Periodical Librarian

## Processing Librarian

Harry Castor.....Purchasing Agent  
John L. .... Personnel Records

### Purchasing Agent

John Johnson..... Personnel Records  
Sidney S. Shouse..... Comptroller and  
Treasurer of the Board

#### .... Comptroller and

### Treasurer of the Boards

Donald Cowles..... Food Service Manager  
Howard Dugan..... Superintendent of Buildings and Grounds

## Food Service Manager

B. J. Barnes..... Mechanical Engineer  
Roy W. Greer..... Bookstore Manager

Mechanical Engineer

Dale Mooney..... Mail and Duplicating Services Supervisor  
Wallace Matthews..... Security Supervisor

## Mail and Duplicating Services Supervisor

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### Security Supervisor



## FACULTY

(The date indicates the first year of service at this college.)

Leon C. Billingsly	President of the College and Professor of Education B.S., Southwest Missouri State College; M.S., Kansas State College of Pittsburg; Ed.D., University of Arkansas	1962
Edward S. Phinney	Dean of the College and Professor of History Th.B., A.B., Marion College; M.A., Butler University; Ph.D., University of Oregon	1967
Roger E. Adams	Assistant Professor of Automotive Technology B.S.I.T., M.S., Kansas State College of Pittsburg	1966
Lawrence R. Albright, II	Associate Professor of Chemistry B.S., Northwest Missouri State College; M.S., Ph.D., University of Nebraska	1969
Charles S. Allen	Assistant Professor of Mathematics B.S., Drury College; M.S., Illinois Institute of Technology; Ph.D., University of Georgia	1970
V. L. Anderson	Assistant Professor of Drafting B.S., Northwest Missouri State College; Stout Institute; M.S., Kansas State College of Pittsburg	1946
Vernon D. Baiamonte	Head, Department of Physical Sciences and Professor of Chemistry A.B., M.A., Colorado State College; Ph.D., Indiana University	1967
Floyd E. Belk	Director of Student Personnel Services; Assistant Dean of the College and Professor of Education and Psychology B.S., M.S., Kansas State College of Pittsburg; Ed.D., Oklahoma State University	1966
*David C. Bingman	Assistant Professor of Biology B.S., M.S., Kansas State College of Pittsburg	1963
E. Enid Blevins	Assistant Professor of English B.S., Southwest Missouri State College; M.S., Kansas State College of Pittsburg	1966
Harold W. Bodon	Assistant Professor of French and German A.B., University of Utah; M.S., California State College Hayward; Ph.D. Candidate, Brigham Young University	1971

\*On leave for doctoral studies, 1972-73.

## FACULTY

- Rochelle L. Boehning** ..... Head, Department of Mathematics 1967  
and Associate Professor of Mathematics  
B.S., M.S., Kansas State College of Pittsburg; Doctoral Studies,  
Illinois Institute of Technology
- Gale W. Bogard** ..... Head, Department of Physical Education 1967  
and Assistant Professor of Physical Education  
B.S., University of Kansas; M.S., Ed.S., Kansas State Teachers  
College of Emporia
- G. Joyce Bowman** ..... Assistant Professor of Speech 1967  
B.S., Southwest Missouri State College; M.A., University of  
Arkansas
- Milton W. Brietzke** ..... Head, Department of Speech and Drama 1956  
and Associate Professor of Speech and Drama  
A.B., San Jose State College; M.A., Western Reserve University;  
Doctoral Study, University of Denver
- Anthony J. Calwhite** ..... Instructor of Physical Education 1969  
B.S., Southwest Missouri State College; M.E., University of  
Missouri
- Robert D. Carpenter** ..... Director of Computer Center 1967  
and Assistant Professor of Computer Programming and  
Data Processing  
B.S., Kansas State College of Pittsburg
- JoAnna M. Challman** ..... Visiting Instructor of Sociology 1972  
A.B., M.A., University of Kansas
- James W. Chapman** ..... Visiting Professor of Music 1972  
B.S., Gorham State College; M.A., University of New  
Hampshire; Ph.D. Candidate, University of Iowa
- Fred Cinotto** ..... Administrative Assistant 1965  
and Professor of Education  
B.S., M.S., Kansas State College of Pittsburg
- Nathanial S. Cole** ..... Associate Professor of Art 1970  
B.F.A., M.F. A., Kansas City Art Institute
- Francisco R. Colon** ..... Assistant Professor of Foreign Languages 1968  
B.S., Southwest Missouri State College; M.A., University of  
Illinois
- Edith M. Compton** Assistant Professor of Business Administration 1967  
B.S., M.S., Kansas State College of Pittsburg
- Harold Cooper** ..... Chairman, Division of Arts and Sciences 1968  
and Professor of History  
A.B., Berea College; M.A., Ph.D., University of Nebraska



## FACULTY

<b>Jimmy Couch</b> .....	Assistant Professor of English	1970
A.B., M.A., Texas Technological College; Ph.D. Candidate, University of South Carolina		
<b>Clarence E. Cowan</b> .....	Associate Professor of General Business	1958
B.S., Southwest Missouri State College; M.Ed., University of Missouri		
<b>John M. Cragin</b> .....	Assistant Professor of Physics and Data Processing	1967
B.S., United State Military Academy, West Point; M.S., Purdue University		
<b>Frank Davis</b> .....	Assistant Professor of Physical Education	1967
and Head Basketball Coach B.S., Peru State Teachers College; M.S., Central Missouri State College		
<b>*Lucille E. Dinges</b> .....	Assistant Professor of English	1969
A.B., Fort Hays Kansas State College; M.A., Ph.D. Candidate, Louisiana State University		
<b>Darral A. Dishman</b> .....	Head, Department of Art	1966
and Assistant Professor of Art B.F.A., Kansas City Art Institute; M.S., Kansas State College of Pittsburg		
<b>Roy F. Dix</b> .....	Instructor of Law Enforcement	1970
B.S., Kansas State College of Pittsburg		
<b>Glenn D. Dolence</b> .....	Dean of Men	1969
and Director of Athletics, Assistant Professor B.S., Missouri Valley College; M.S., Kansas State College of Pittsburg; Ed.D., University of Arkansas		
<b>Mary L. Dove</b> .....	Periodical Librarian and Assistant Professor	1969
B.S., M.A., University of Missouri; M.S., University of Missouri		
<b>Lloyd L. Dryer</b> .....	College Psychologist	1950
and Professor of Psychology B.S., M.A., Ed.D., Oklahoma State University		
<b>Leland D. Easterday</b> .....	Associate Professor of Education	1967
B.S., Northeast Missouri State College; M.A., Southern Illinois University; Ed.D., University of Arkansas		
<b>Doris T. Elgin</b> .....	Assistant Professor of Nursing	1968
B.S. in Nursing, University of Tennessee; M.A., Memphis State University		
<b>Gerald E. Elick</b> .....	Associate Professor of Biology and Geology	1969
A.B., University of Missouri; M.S., Ph. D., University of Arkansas		

\*On leave for doctoral studies, first semester—1972-73

## FACULTY

<b>William C. Elliott</b>	Assistant Professor of Music	1968
B.M.E., M.S., Kansas State College of Pittsburg		
<b>Charles M. Evans</b>	Head, Department of Social Sciences and Associate Professor of Political Science	1970
B.S., Northeast Missouri State College; M.A. University of Kentucky; Ph.D. Candidate, University of Colorado		
<b>William L. Ferron</b>	Assistant Professor of Biology	1971
B.S., Creighton University; M.A., Southern Methodist University Ph.D., Kansas State University		
<b>Carl A. Finke</b>	Associate Professor of Business Administration	1970
B.S.B.A., University of Arkansas; J.D., University of Oklahoma; CPA		
<b>Jon H. Fowler</b>	Assistant Professor of Art	1968
B.S., Southwest Missouri State College; M.F.A., University of Arkansas		
<b>James L. Frazier</b>	Assistant Professor of Physical Education and Head Football Coach	1971
A.B., University of Wichita; M.A., Wichita State University		
<b>Helen R. Gardner</b>	Associate Professor of English	1968
A.B., M.A., Bradley University; Ed.D., Indiana University		
<b>E. Sam Gibson</b>	Head, Department of Biology and Associate Professor of Biology	1967
B.S., M.S., Kansas State College of Pittsburg; Ph.D., Kansas State University		
<b>Larry W. Goode</b>	Assistant Professor of General Business	1968
B.S., M.S., Kansas State College of Pittsburg		
<b>Judy Grant</b>	Instructor of Sociology	1969
A.B., M.S., Kansas State College of Pittsburg		
<b>James M. Gray</b>	Assistant Professor of Business Administration	1969
B.B.A., Dana College; M.B.A., University of Arkansas		
<b>George C. Greenlee</b>	Instructor of English	1970
A.B., M.A., Northeast Louisiana State College		
<b>*Conrad E. Gubera</b>	Instructor of Sociology	1967
B.S., M.S., Kansas State College of Pittsburg		
<b>Clark I. Guilliams</b>	Head, Department of Psychology and Professor of Education and Psychology	1967
A.B., M.Ed., University of Missouri; Ed.D., University of Arkansas		

\*On leave for doctoral studies, 1971-73



## FACULTY

<b>Henry L. Harder</b> . . . . .	Head, Department of Language and Literature and Assistant Professor of English A.B., Subiaco College; M.A., University of Arkansas; Ph.D., University of Maryland	1970
<b>Wayne A. Harrell</b> . . . . .	Acting Head, Department of Music and Assistant Professor of Music B.M.E., M.M.E., Wichita State University; Ed.D., University of Northern Colorado	1971
<b>Robert A. Harris</b> . . . . .	Assistant Professor of Music B.M., M.S., Kansas State College of Pittsburg, Pupil of Rosina Lhevinne	1971
<b>Cletis Headlee</b> . . . . .	Associate Professor of English B.S., M.A., University of Missouri	1946
<b>Darrell L. Henderson</b> . . . . .	Visiting Instructor of Sociology A.B., M.S., Kansas State College of Pittsburg	1972
<b>Garry J. Hess</b> . . . . .	Instructor of Art B.S., Fort Hays Kansas State College; M.A., Kansas State College of Pittsburg	1971
<b>Robert O. Highland</b> . . . . .	Director of Student Teaching and Professor of Education B.M.E., M.M.E., University of Oklahoma; Ed.D., University of Arkansas	1968
<b>Linda C. Hill</b> . . . . .	Dean of Women A.B., Oklahoma State University; M.E., Colorado State University	1971
<b>T. L. Holman</b> . . . . .	Assistant Professor of History A.B., Southwestern College, Winfield, Kansas; M.A., Kansas State College of Pittsburg; Ed.D., Oklahoma State University	1962
<b>Julie S. Hughes</b> . . . . .	Assistant Professor of History B.S., M.A., Kansas State College of Pittsburg	1963
<b>Richard D. Humphrey</b> . . . . .	Director of Aids and Awards; Assistant Professor B.S., M.S., Kansas State College of Pittsburg	1968
<b>Duane L. Hunt</b> . . . . .	Assistant Professor of Speech and Drama A.B., Southwest Missouri State College; M.A., University of Arkansas	1964
<b>Paul E. Jensen</b> . . . . .	Associate Professor of Mathematics B.S., Oklahoma City University; M.S., Ed.S., Kansas State College of Pittsburg	1960

## FACULTY

<b>Delbert I. Johnson</b>	Assistant Professor of Music	1967
B.M.E., M.M.E., University of Wichita		
<b>Paul W. Johnson</b>	Instructor of Economics	1972
B.S., United States Naval Academy; B.G.S., University of Nebraska; M.A., University of Oklahoma		
<b>Jack D. Jolly</b>	Assistant Professor of Mathematics	1968
B.S.E., M.A., University of Oklahoma; Graduate Study, University of Texas, University of Wisconsin		
<b>J. Merrell Junkins</b>	Associate Professor of Psychology	1964
B.S., M.S., Kansas State College of Pittsburg; Ed.D., Oklahoma State University		
<b>L. Kathleen Kane</b>	Circulation Librarian; Instructor	1972
A.B., M.L.S., University of Oklahoma		
<b>Larry K. Karst</b>	Guidance Counselor; Assistant Professor	1968
B.S., Kansas State College of Pittsburg; M.S., Kansas State Teachers College of Emporia		
<b>Harrison M. Kash</b>	Assistant Professor of Chemistry	1958
A.B., Kansas State College of Pittsburg; M.S., Kansas State University		
<b>Retha L. Ketchum</b>	Instructor of Nursing	1970
B.S. in Nursing, Creighton University		
<b>Dale R. Kirkham</b>	Assistant Professor of Biology	1972
B.S., Ft. Hays Kansas State College; M.S., University of Wyoming; Ph.D., University of Missouri, Columbia		
<b>Joseph P. Lambert</b>	Assistant Professor of English	1970
A.B., M.A., Mississippi College; Ph.D., Auburn University		
<b>Douglas Landrith</b>	Assistant Professor of Physical Education	1959
and Golf Coach		
B.S., M.S., Kansas State College of Pittsburg		
<b>L. Keith Larimore</b>	Chairman, Division of Business Administration	1966
and Associate Professor of Business Administration		
B.S.B.A., Kansas State College of Pittsburg; M.B.A., University of Oklahoma; Ph.D., University of Arkansas		
<b>Billie A. Legg</b>	Director of Nursing	1969
Assistant Professor of Nursing		
B.S., St. Louis University; M.S. in Nursing, Indiana University		
<b>Charles E. Leitle</b>	Assistant Professor of Business Administration	1970
B.S.B.A., M.B.A., Ph.D., University of Arkansas		



## FACULTY

- Julio S. Leon** ..... Assistant Professor of Business and Economics 1969  
A.B., Universidad Tecnica (Santiago, Chile); M.B.A., North Texas State University; Ph.D., University of Arkansas
- William R. Livingston** ..... Assistant Professor of Mathematics 1968  
B.S., Kansas State College of Pittsburg; M.S., University of Illinois
- Geraldine M. Logue** ..... Instructor of Nursing 1969  
R.N. (Burge Hospital, Springfield, Missouri); A.B. in Nursing, Drury College
- Robert P. Markman** ..... Associate Professor of History 1967  
B.S., Monmouth College; M.A., Ph.D., University of Oklahoma
- Patricia Ann Marquardt** ..... Visiting Instructor of English 1972  
B.S., M.S., Kansas State College of Pittsburg
- J. Larry Martin** ..... Assistant Professor of Mathematics 1965  
B.S., M.S., University of Tulsa  
Ed. D. Candidate, University of Georgia
- B. W. Mason** ..... Associate Professor of Education 1967  
and Director, Micro-Teaching Laboratory  
A.B., M.A., Colorado State College of Education, Greeley;  
Graduate Study, Teachers College, Columbia University
- Dwight E. Mason** ..... Instructor of Automotive Technology 1966  
B.S., Oklahoma State University; M.S., Kansas State College of Pittsburg
- Richard W. Massa** ..... Associate Professor of Journalism 1972  
A.B., M.A., University of Missouri, Columbia; Graduate studies, University of Arkansas
- James K. Maupin** ..... Associate Dean for Technology 1955  
and Associate Professor of Biology  
B.S., Central Missouri State College; M.S., Kansas State College of Pittsburg; Graduate Study, University of Minnesota, Oklahoma State University, University of Oklahoma, University of Oregon
- Bernard P. McCormick** ..... Assistant Professor of English 1968  
A.B., University of Notre Dame; M.S., University of Southern Mississippi
- J. Ralph McLemore** ..... Instructor of Business Administration 1971  
B.S., University of Kansas; M.S., Kansas State College of Pittsburg

## FACULTY

<b>Robert J. Miller</b>	..... Acting Chairman, Division of Business Administration and Assistant Professor of Business Administration B.S., M.A., Central Missouri State College	1968
<b>Lorine V. Miner</b>	..... Assistant Professor of Business Education B.S., M.S., Kansas State College of Pittsburg	1966
<b>Grace C. Mitchell</b>	..... Assistant Professor of English A.B., Greensboro College; M.A., Pennsylvania State University	1958
<b>Arlene E. Moore</b>	..... Reference Librarian A.B., M.A., Southwest Missouri State College; M.L.S., University of Oklahoma	1971
<b>Henry G. Morgan</b>	..... Assistant Professor of English A.B., M.A., University of Southern Mississippi; Ph.D., University of Colorado	1971
<b>Eugene C. Mouser</b>	..... Director of Guidance and Counseling B.M.E., M.S., Ed. D. Oklahoma State University	1970
<b>Elizabeth J. Mueller</b>	..... Processing Librarian A.B., Missouri Valley College	1966
<b>Charles F. Niess</b>	... Chairman, Division of Education and Psychology and Professor of Education B.S., M.S., Central Missouri State College; Ed.D., Colorado State College	1966
<b>Orty E. Orr</b>	..... Professor of Biology B.S., Kansas State College of Pittsburg; M.S., Ph.D., Oklahoma State University	1966
<b>Russell A. Phillips</b>	..... Assistant Professor of Physics B.S., Ph.D., Iowa State University	1970
<b>Harry E. Preble</b>	..... Professor of English A.B., M.A., Ph.D., University of Illinois	1968
<b>Vonnie R. Prentice</b>	..... Visiting Professor of Biology B.S., Northeastern State College, Tahlequah, Oklahoma; M.S., Ph.D. Candidate, University of Arkansas	1972
<b>Gail K. Renner</b>	..... Assistant Professor of History B.S., Southwest Missouri State College; M.A., University of Missouri, Columbia; M.A., University of Missouri, Kansas City; Ph.D. Candidate, University of Missouri	1965
<b>Ronald E. Rhea</b>	..... Instructor B.S., M.S., Kansas State College of Pittsburg	1972



## FACULTY

- Dennis H. Rhodes** ..... Professor of Speech and Drama 1970  
A.B., University of Texas; M.E., University of Houston; Ph.D.,  
Southern Illinois University
- Hilda E. Richardson** ..... Instructor of Psychology 1972  
B.S., Kansas State College of Pittsburg; M.S., Kansas State  
Teachers College of Emporia
- Elmer E. Rodgers** ..... Head Librarian and Associate Professor 1968  
A.B., Youngstown University; M.S.L.S., Western Reserve  
University
- Sallie L. Roper** ..... Instructor of Physical Education 1972  
B.S., Missouri Southern State College; Master's Degree  
Candidate, Kansas State College of Pittsburg
- James N. Roubidoux** ..... Assistant Professor of Mathematics 1969  
A.B., Ft. Lewis College; M.S., Oklahoma State University
- James V. Sandrin** ..... Assistant Professor of Education 1969  
B.S., M.S., Ph.D., Southern Illinois University
- Delbert F. Schafer** ..... Assistant Professor of History 1968  
A.B., Southwestern State College; M.A., University of Oklahoma  
Ph.D., University of Oklahoma
- O. L. Schuster** ..... Associate Director of Teacher Education 1967  
and Professor of Education  
B.S., Southwest Missouri State College; M.Ed., University of  
Missouri; Ed.D., University of Mississippi
- Gary Wayne Scott** ..... Instructor of Machine Technology 1972  
B.S., Kansas State College of Pittsburg
- Donald L. Seneker** ..... Director of Police Academy 1971  
and Instructor, Law Enforcement  
B.S., Central Missouri State College
- R. Clyde Shipley** ..... Assistant Professor of Physical Education 1969  
B.S., Missouri Valley College; M.S., Central Missouri State  
College
- Paul R. Shipman** ..... Administrative Assistant, 1965  
Director of Business Operations  
and Professor of Education  
B.S.E., Southwest Missouri State College; M.S., Kansas State  
College of Pittsburg; Ed.D., University of Arkansas
- Bobbie Z. Short** ..... Assistant Professor of English and Speech 1965  
B.S., Southwest Missouri State College; M.S., Kansas State  
College of Pittsburg

## FACULTY

<b>F. Joe Sims</b>	Associate Professor of Music	1971
B.M., Southwestern College, Winfield, Kansas; M.A., University of Northern Colorado; Ed.D., University of Oklahoma		
<b>Ann M. Slanina</b>	Assistant Professor of English	1971
A.B., St. Francis College, Fort Wayne, Indiana; M.A., University of Dayton; Ph.D. Candidate, University of New Mexico		
<b>Marion E. Sloan</b>	Assistant Professor of Physics	1967
A.B., M.S., Kansas State College of Pittsburg		
<b>Robert E. Smith</b>	Instructor of History	1972
B.S., Northwest Missouri State College, Maryville, Missouri; B.S., University of Wisconsin; M.A., Oklahoma State University; Ph.D., Oklahoma State University		
<b>Ross C. Snyder</b>	Director of Educational Media and Associate Professor of Education	1968
B.S., Taylor University; M.A., Ball State University		
<b>Sam J. Starkey</b>	Associate Professor of Education and Psychology	1966
B.S., M.B., Ed.D., University of Arkansas		
<b>Annetta E. St. Clair</b>	Assistant Professor of Political Science	1964
A.B., M.A., Kansas State College of Pittsburg		
<b>Wayne E. Stebbins</b>	Assistant Professor of Biology	1969
B.S., M.S., Kansas State Teachers College of Emporia		
<b>Bob F. Steere</b>	Professor of Education	1969
B.S., Southwestern State College; M.S., Arizona State College; Ed.D., Utah State University		
<b>Dudley F. Stegge</b>	Director of College Union and Assistant Professor of Physical Education	1952
B.S., M.S., Kansas State College of Pittsburg		
<b>George W. Steinsberger</b>	Instructor of Political Science	1972
B.A., M.A., Indiana University		
<b>Daniel R. Stengel</b>	Assistant Professor of Business Administration	1967
B.S., M.A., University of Nebraska		
<b>Dorothy A. Stone</b>	Associate Professor of Business Administration	1939
B.S., M.A., University of Missouri		
<b>Arthur L. Strobel</b>	Assistant Professor of Physics	1963
B.S., Southeast Missouri State College; M.S., University of Arkansas		



## FACULTY

- Lenard H. Studerus** ..... Assistant Professor of Foreign Languages 1970  
 A.B., University of Washington; M.A., San Diego State College;  
 Ph.D. Candidate, University of Colorado
- Pudukkottai K. Subramanian** ... Assistant Professor of Mathematics 1970  
 B.S., University of Delhi, India; M.A., Miami University of Ohio;  
 Ph.D., University of Wisconsin
- \*William L. Taylor** ..... Head, Department of Music 1966  
 and Assistant Professor of Music  
 B.S., M.M.E., University of Arkansas
- George H. Volmert** ..... Registrar; Assistant Professor of Education 1966  
 B.S., M.A., Northeast Missouri State College
- James T. Volskay** ..... Assistant Professor of Psychology 1969  
 B.S.E., Southwest Missouri State College; M.E., Ph.D.,  
 University of Missouri
- Charles L. Wade** ..... Instructor of Physical Education 1972  
 B.S., Southwest Missouri State College; M.A., Northeast  
 Missouri State College
- Doris A. Walters** ..... Instructor of English 1967  
 B.S., M.A., Kansas State College of Pittsburg
- Byron L. Wayman** ..... Visiting Professor of Sociology 1972  
 A.B., Greenville College; M.S., Oklahoma State University
- Philip R. Whittle** ..... Assistant Professor of Chemistry 1970  
 B.S., University of Kentucky; Ph.D., Iowa State University
- Robert C. Wiley** ..... Associate Professor of Education 1969  
 B.S., M.Ed., Trinity University; Ed.D., Oklahoma State  
 University
- Harold R. Willis** ..... Assistant Professor of Psychology 1970  
 A.B., George Washington University; M.A., M.S., Jackson  
 College; Graduate Study, Washington University
- W. Ralph Winton** ..... Director of Admissions; Assistant Professor 1968  
 B.S., Drury College; M.E., University of Arkansas
- Pauline W. Wolfe** ..... Associate Professor of English 1967  
 A.B., University of Wyoming; M.A., Northwestern University;  
 Graduate Study at University of New Mexico
- Rebekah L. Wood, R.N.** ..... Instructor of Nursing 1967  
 B.S., Marquette University

\*On leave for doctoral studies, 1972-73

## **FACULTY**

- James S. Worthington** ..... Assistant Professor of Business Administration 1970  
B.S., Kansas State College of Pittsburg; M.A., University of Missouri; CPA
- Edward W. Wuch** ..... Assistant Professor of Physical Education and Head Baseball Coach 1969  
B.S., M.E., University of Missouri
- Venus Yount** ..... Assistant Professor of Physical Education 1959  
B.S., Kansas State College of Pittsburg; M.A., University of Arkansas
- Donald R. Youst** ..... Assistant Professor of Political Science 1971  
A.B., M.S., Kansas State Teachers College, Emporia; Ph.D., University of Nebraska

## **EMERITUS FACULTY**

- Harry C. Gockel** ..... Professor of History and Geography  
A.B., M.A., Washington University; M.S., University of Wisconsin
- Martha Ann McCormick** ..... Professor of Mathematics  
Ph.B., M.A., University of Chicago

## **PART TIME FACULTY**

- James Brown** ..... Instructor of Business Administration; B.S., Missouri Southern State College; CPA
- Jerry P. Coburn** ..... Instructor of Drafting  
B.S., M.S., Kansas State College of Pittsburg
- Robert E. DeLong** ..... Instructor of Music  
B.M.E., Wichita State University
- James F. DeNeen** ..... Instructor of Business Law  
B.S., J.D., University of Missouri
- Suzan A. DeNeen** ..... Instructor of Business Education  
B.S., University of Missouri
- Bill Fellers** ..... Instructor of Business Administration  
B.S., Kansas State University; M.B.A., University of Tulsa; CPA
- Judith A. Fowler** ..... Instructor of Art  
B.F.A., Southwest Missouri State College; M.F.A., University of Utah



## FACULTY

**Ray Hess** ..... Instructor of Business Administration  
B.S., M.B.A., Southern Illinois University; CPA

**Harriet L. Hobson** ..... Instructor of Data Processing  
B.S., Missouri Southern College

**Patricia W. Kluthe** ..... Instructor of Speech  
A.B., Missouri Southern State College; M. A., University of  
Minnesota

**Myra L. Landrith** ..... Instructor of Nursing  
B.S., Kansas State University; B.S. in Nursing, University of  
Kansas

**Richard E. Long** ..... Instructor, Health Facilities Management  
B.S., University of Akron, MHA Washington University

**William N. McDonald, Jr.** .... Instructor of Business Administration  
B.S., University of Missouri

**Glenn E. Robinson** ..... Instructor of Business Administration  
A.B., San Diego State College; J.D., University of San Diego  
School of Law

**Robert C. Stringer** ..... Instructor of Business Administration  
B.S., Missouri Southern State College; M.B.A., University of  
Arkansas

**Leo J. Wright** ..... Instructor of Data Processing  
B.S., Kansas State College of Pittsburg

## AFFILIATED FACULTY

**Ellen F. Clements, R. T.** ..... Instructor of Radiological Technology  
Graduate Burge Protestant Hospital School of Radiologic  
Technology; Registered Radiologic Technologist-American  
Registry of Radiologic Technologists

**M. F. Hall, M. D.** ..... Director—School of Radiologic Technology

# **GENERAL INFORMATION**

## **THE COMMUNITY AND SERVICE AREA**

Missouri Southern State College is situated in Southwest Missouri, eleven miles from the Kansas state line, 40 miles from the Arkansas border, and 15 miles from Oklahoma. In this southwest part of Missouri lies a nine-county area comprising approximately 200,000 people.

The campus, located at the northeast edge of Joplin on 310 acres of gently rolling land, is within commuting distance of a large college population. The college lies at the heart of a cluster of cities with populations up to 45,000. Some of these cities are Joplin (the largest), Carthage, Webb City, Carl Junction and Sarcoxie. The college is located in the hub of a four-state area with its network of east-west and north-south major highways and good air transportation schedules. Known in the early 1900's as an area of diversified agricultural activities and lead and zinc mining, it is even better known today as a rapidly growing industrial and service center. It is within easy driving distance of the Ozarks, one of the great recreational areas of the United States. Cultural activities, educational programs from kindergarten to college, and beautiful churches for all faiths are ideal for a college setting.

## **HISTORY**

Missouri Southern State College originated in 1937 as Joplin Junior College. It was a part of the Joplin Public School System, but the first year of classes was conducted by the Extension Division of the University of Missouri.

The first year, classes were held in the Joplin Senior High School building. The college moved into its own building at Fourth Street and Byers Avenue on September 6, 1938. After 20 years in this location the college was transferred to 310 West Eighth Street where it continued to operate until June, 1967. The educational and administrative functions of Missouri Southern State College were moved to the new campus in June 1967. Here the college is operating on a new, multiple building campus with an enlarged program and student body.

A series of new organizational and legal developments began in April, 1964.



## **GENERAL INFORMATION**

On April 1, 1964, the voters created the Junior College District of Jasper County, naming a six-member Board of Trustees. This act ended the junior college's 27 years of existence as a part of the Joplin Public School System. The new junior college district included Jasper County and parts of three other counties—Newton, Lawrence and Barton. The institution was renamed Jasper County Junior College.

On July 22, 1965, the 73rd General Assembly of the Missouri Legislature passed House Bill No. 210 providing for the establishment of a two-year state senior college in Jasper County when the academic facilities of the Junior College District of Jasper County should become available. Meanwhile, in anticipation of the passing of the House Bill No. 210, the Board of Trustees adopted the name Missouri Southern College in May, 1965.

The legislative act creating the state senior college provided for the administration of the junior and senior college through a governor-appointed Board of Regents. The appointments were made on October 13, 1965, the date that marks the beginning of the operation of Missouri Southern State College under the Board of Regents. The law directed the Board of Trustees to assume the responsibility of levying the necessary taxes within the Junior College District of Jasper County which, together with state junior college aid and funds available from other sources, are sufficient to pay the costs of the junior college operation and the costs to date of capital improvements for both the junior and senior colleges. The state provides the operating cost of the senior college.

## **COLLEGE PROFILE**

The combining of a two-year locally supported junior college with a two-year state supported senior college makes Missouri Southern State College unique in college history. Although the two programs have separate support, they have one faculty and one administration functioning under the supervision of the Board of Regents appointed by the Governor.

The college has an open-door admissions policy for graduates of Missouri high schools. It offers studies leading to a bachelor's degree in a number of major areas in the liberal arts, teacher education and business administration. In addition, liberal arts

## **GENERAL INFORMATION**

and pre-professional transfer programs, technical education and certificate programs are available to students who do not wish to pursue a baccalaureate degree.

## **COLLEGE PHILOSOPHY AND PURPOSES**

Missouri Southern State College is dedicated to the principle of developing a college community where all members are given the opportunity to learn, not only for the sake of learning, but for the purpose of revealing ways to live a better life.

Missouri Southern State College offers a diversity of study designed to satisfy a wide range of student and community interests. The college endeavors to maintain quality instruction at all levels.

Missouri Southern State College shares a responsibility with other state colleges to serve any eligible student in the State of Missouri who may apply for admission. In addition, the college also recognizes its responsibility and obligation to serve the citizens of the Junior College District of Jasper County, Missouri.

The college fulfills its obligation to both state and community by:

- a. Providing a program of general education for all students;
- b. Preparing students for professional and graduate programs of study;
- c. Preparing teachers for elementary and secondary schools;
- d. Preparing students for business, industry, and government;
- e. Providing a variety of technical programs;
- f. Serving as a center for adult education and community activities.

## **STANDARDS FOR STUDENT CONDUCT**

As active members of the college community, students at Missouri Southern State College have the rights and privileges enjoyed by members of all democratic communities. They also have the responsibilities and obligations which accompany



## GENERAL INFORMATION

these rights. Missouri Southern State College is guided by and observes the principle that there shall be no difference in the treatment of persons because of race, creed, color or national origin; and all members of the academic community are expected to support this principle.

Students have the responsibility of upholding the standards, traditions and policies of the college which has granted them membership in the academic community at their own request. They also have the responsibility of making maximum use of their abilities, of exercising good judgment, of observing the rights of others, and of adhering to the requirements of adult society.

In addition, the following general policies are in effect:

1. Students have the obligation to obey all rules and regulations and to preserve all property provided for their education.

2. Students are expected to conform to all federal, state and local laws. Gambling, alcoholic beverages, drugs, firearms, ammunition and explosives are specifically prohibited on college property and in off-campus student living quarters.

3. The conduct of the individual student is an important indication of his character and of his future potential in life. Cheating, falsification of documents and immoral conduct will not be tolerated.

4. Students are expected to conform to the usually accepted social customs of the community.

5. Students shall not engage in or incite others to participate in obstructive or disruptive activities, deprive others of their rights, do harm to other individuals or property, or interfere with college or other officials in the performance of their duties.

6. The College Union of Missouri Southern State College and its facilities are dedicated to and for the primary use of the students, faculty, staff and their authorized guests. Individuals entertaining guests in the College Union are responsible for their proper identification, registration and conformance to the rules established for such guests. When not in use by campus organizations, off-campus groups may use the facilities of the Union.

7. The facilities of the Residence Halls at Missouri Southern State College are primarily for the use of the residents thereof



## GENERAL INFORMATION

and their invited guests. The host is responsible for the registration and conduct of his guests. Disciplinary action will be taken against non-residents making unauthorized use of residence hall facilities.

8. The prevention of fire and the safety of others is the responsibility of the individual. Students shall not set off false fire alarms, misuse fire equipment, or refuse to obey lawful directions by fire wardens.

The foregoing shall apply to all student conduct, and failure to observe these standards will constitute basis for disciplinary action, the maximum of which is dismissal from the College. Registration and participation as a student in Missouri Southern State College shall constitute full acceptance of these standards, as well as of all other rules and standards of conduct which have been or may be adopted.

## ACCREDITATION AND MEMBERSHIPS

Missouri Southern State College is accredited by the North Central Association of Colleges and Secondary Schools and by the Missouri State Department of Education.

Major memberships include the American Council on Education, the American Association of State Colleges and Universities, the American Association of Colleges for Teacher Education, the Missouri Association of Junior Colleges, and the North Central Association Sub-Committee on Institutions for Teacher Education.

## THE CAMPUS

Missouri Southern State College is located at the corner of Newman and Duquesne Roads near the northeast edge of Joplin. Fourteen new buildings and several remodeled older buildings serve the instructional and student activity needs.

**Spiva Library**, named in honor of the late George A. Spiva of Joplin, a friend and generous supporter of the college, provides an atmosphere which contributes to an intellectual climate. It is a part of the **Learning Resources Center** which includes the **Instructional Media Center** as well as the Library.

**Hearnes Hall** is named after the Honorable Warren E.



## GENERAL INFORMATION

Hearnes, former Governor of Missouri. The building is the administration headquarters and the reception center of the campus. It contains, also instructional classrooms and faculty offices.

**The L. R. Reynolds, Jr., Science and Mathematics Hall** provides three large, elevated lecture rooms, regular classrooms, science laboratories and faculty offices. It is well equipped to meet the requirements of science and mathematics programs.

**Fine Arts Hall** is a complex of two buildings connected by an arcade that serves the areas of Art and Music. The art building includes a large exhibit hall that serves the Spiva Art Center of Joplin as well as the needs of the college.

**The Physical Education Building** houses the college basketball floor, classrooms, faculty offices, and many facilities for physical education classes.

**The College Union** serves the total campus with cafeteria, coffee shop, bookstore, lounge areas, Student Senate offices, yearbook offices, faculty lounge, ballroom, etc.

**The Business Administration Building** is a combination of the old Mansion House and the new building addition. It houses specialized and regular classrooms and faculty offices.

**The Barn Theatre** is a barn converted into an air-conditioned theatre with classrooms, dressing rooms, costume rooms, ticket booth and foyer.

**Kuhn Hall** is a new structure that provides facilities for the nursing education program, computer center and the student health center. This building is named after Dr. J. R. Kuhn, Jr., a strong supporter and leader of the nursing education program at Missouri Southern State College. The Student Health Center is located in Kuhn Hall. A full-time registered nurse is on duty and medical doctors from the community provide services at stated hours.

**The Technology Building** is a new structure that provides facilities and faculty offices for Automotive Technology, Machine Technology, Drafting and Design, and classrooms for other instructional activities.

**The College Placement Building** is headquarters for the College Placement Services and Alumni Offices. It contains offices, interviewing rooms, and one academic facility--the reading laboratory.

## GENERAL INFORMATION

**The Police Academy Building** is a new structure that houses the Campus Security Office and offices for the director and faculty of the Law Enforcement Department plus specialized classrooms for Academic and Academy programs in law enforcement. A complete photographic laboratory and a criminalistics laboratory are also located in this building.

**The Men's Residence Hall** houses 212 men. It is an attractive and modern residence hall, completed in the Spring, 1970.

**The Women's Residence Hall** was also completed in the Spring, 1970, and will accommodate 112 women.



## GENERAL INFORMATION

### SCHEDULE OF FEES

Students must pay fees at the regular time of registration each semester or have their registration automatically cancelled. Contractual arrangements for unique hardship problems must be arranged with the Director of Business Operations or his delegated representative prior to registration. Any failure to live up to the contractual agreement also automatically cancels the registration.

The College reserves the right to change fees without notice.

#### INCIDENTAL FEES

	Each Fall and Spring Semester 8 Hours or more	Less than 8 hours	Summer Term
<b>I. Residents of the Junior College District</b>			
Junior College Division	\$95	\$ 9 per hr.	\$10 per hr.
Senior College Division	150	13 per hr.	15 per hr.
<b>II. Residents of Missouri</b> (Outside Junior College District)			
Junior College Division	\$150	\$13 per hr.	\$15 per hr.
Senior College Division	150	13 per hr.	15 per hr.
<b>III. Non-Residents (Out-of-State)</b>			
Junior College Division	\$345	\$22 per hr.	\$25 per hr.
Senior College Division	345	22 per hr.	25 per hr.

#### OTHER FEES:

Application for admission	\$ 5.00
Applied music	32.00
Change of class schedule	2.00
Commencement	10.00
Cosmetology special fees	
First term	120.00
All other terms, each	70.00
Laboratory breakage and materials	cost
Late registration (full time)	10.00
(part time)	5.00
Radiologic Technology special fees	
First Term	100.00
All other terms, each	40.00
Student activity	5.00
Textbook rental and service charge	
(50% refundable):	
Spring and fall semester	
(over 8 hours)	30.00
Spring and fall semester	
(under 8 hours)	
and summer term	6.00 per course
Towel Fee for physical activity classes	1.25
Transcripts	1.00
RESIDENCE HALL COST (Per semester):	\$425.00
(Summer \$210.00)	



## GENERAL INFORMATION

(See detailed explanations below.)

**Application for Admission:** A non-refundable application fee of \$5.00 is charged for processing applications for admission. The payment of this fee should be mailed with the application.

**Applied Music:** For one 30-minute lesson per week in applied music, the usual fee is \$32.00 per semester.

**Change of Class Schedule:** Students who are charged \$2.00 for each class change made after classes begin (refer to College calendar). Students registered for 8 or more credit hours before and after the change in schedule will pay only the \$2.00 fee. Those changing from 7 or less hours to 8 or more hours must pay the full incidental and textbook fees and the \$2.00 change fee. Those who are registered for 8 or more hours and change to 7 or less hours during the change-of-registration week will receive a refund and will be charged by the credit hour.

**Commencement:** Candidates for the Associate of Baccalaureate degrees are charged a \$10.00 commencement fee. This covers the cost of the diploma, cap and gown, and other commencement activities. The fee is subject to refund only when the candidate fails to qualify for graduation.

**Evening Session:** Students enrolled in evening classes for regular college credit courses, applicable toward an Associate or Baccalaureate Degree, are subject to the same fees, rules and regulations of the Day Session. Special fees are announced in the Evening Session Bulletin for classes not applicable to an Associate or Baccalaureate Degree.

**Laboratory Breakage and Materials:** There are no charges for the use of equipment in laboratories. The student will be expected to pay for excessive breakage or loss of equipment due to negligence on the part of the student. A fair actual value of the loss will be determined by school officials. Students will pay for materials used in individual projects. (Example: automotive parts.)

Students enrolled in chemistry are required to purchase a \$10.00 laboratory breakage card which may be redeemed for this full amount at the end of the semester, providing there has been no breakage or loss on the part of the student.

**Late Registration:** A late registration fee of \$10 is charged full-time students who register after classwork begins. Five dollars is charged part-time students. This fee is not refundable.

*Miscellaneous Fees:* Occasionally a fee is charged for



## GENERAL INFORMATION

classroom materials, such as subscriptions to a periodical, line charges for bowling in physical education, film developing in photo-journalism, or purchase of paperback books in addition to the textbook rental.

**Student Activity:** This charge is to support activities of the Student Senate and the College Union Board. Students enrolled in less than eight hours during a semester may purchase a student activity ticket at the Business Office.

**Summer Session:** Rules and regulations which govern admission to the first and second semester during the regular school year shall also apply to the Summer Session.

**Textbook Rental and Instructional Services:** Students enrolled during a semester in eight or more credit hours pay a \$15.00 non-refundable textbook rental fee (includes normal laboratory fees and cost of service on instructional equipment) and a \$15.00 textbook deposit. Students enrolled in less than eight credit hours during any semester pay a \$3.00 deposit and \$3.00 rental for each course in which they are enrolled. The deposit is refunded when the student has returned all books, materials, and equipment in satisfactory condition. (Books may be purchased at the end of the term for full retail price less an allowance for rental charges paid by the student.)

**Towel Fee:** A \$1.25 fee is charged each semester to students enrolled in the "physical activity" classes. A towel and the weekly laundry of it is furnished by the College.

**Transcripts:** Each student is entitled to two official transcripts without charge. There is a charge of \$1.00 for each additional copy. Payment must accompany the request for each transcript.

## REFUND POLICY (Except for Residence Hall Charges)

Students enrolled in the fall and spring semesters who drop out of the College before the fifth week of the semester are entitled to a partial refund of refundable fees. The refund must be claimed during the term for which the refund applies. The refund will be computed as of the date the Registrar receives the withdrawal form completely and correctly executed. The refund schedule is as follows:

Within the first and second weeks.....80 per cent refund

## GENERAL INFORMATION

Within the third and fourth weeks.....50 per cent refund  
After the fourth week.....No refund

Summer term refunds are as described above, except that no refunds are given after the third week.

## RESIDENCE HALL COST

Charges of \$425.00 per semester will be made and will cover both room and board. Twenty meals per week will be furnished. Charges may be paid in full or in four installments per semester. These are to be paid in the Business Office. Should a student elect the installment method of payment, a ten dollar per semester service charge will be assessed. Payments will be due as follows:

<i>First Semester</i>		<i>Second Semester</i>	
August 1	\$120	January 1	\$120
October 1	105	February 1	105
November 1	105	March 1	105
December 1	105	April 1	105

*Summer Residence Hall Cost.* The board and room charge for the summer session is \$210, which includes 15 meals per week, and payment must be made by June 1. Monthly payments may also be made in \$105 amounts by June 1 and July 1.

See contractual arrangements for residence halls, page 39.



# **STUDENT PERSONNEL SERVICES**

The maximum intellectual growth and personal development of the college student is a combination of academic study and participation in out-of-class activities. Therefore, the educational program of Missouri Southern State College includes all student-college relations in addition to formal instruction.

The student personnel services are designed to supplement, complement and implement the academic program of the College.

## **FINANCIAL AIDS**

### **MISSOURI SOUTHERN STATE COLLEGE ACADEMIC SCHOLARSHIPS**

#### **General Information**

All qualified applicants for financial aid and scholarships will receive consideration without regard to race, creed, national origin or color.

Listed below are the scholarships that will be awarded by Missouri Southern State College for the 1973-74 academic year. Write for scholarship applications to:

OFFICE OF FINANCIAL AIDS

Missouri Southern State College

Joplin, Missouri 64801

## **THE REGENTS AND TRUSTEES SCHOLARSHIP**

#### **The President's Scholarships**

These scholarships are awarded by the Board of Regents and the Board of Trustees of the college and are administered by the principal of the recipient's high school.

Basis of Selection:

The scholarships are awarded to the first and second ranking students in the eight high schools located in Jasper County.

#### **The Dean's Scholarships**

These scholarships are awarded by the Board of Regents and the Board of Trustees of the college and are administered by the principal of the recipient's high school.

## STUDENT PERSONNEL SERVICES

### Patron Scholarships

Donors	Number of Scholarships	Value of Each Scholarship
AAUW—Dorothea Hoover Memorial	2	\$200
American Business Women's Association of Carthage	2	\$150
American Business Women's Association of Joplin	1	\$300
Anonymous No. 1	5	\$200
Anonymous No. 2	2	\$250
Anonymous No. 3	3	\$100
Anonymous No. 4	1	\$200
Anonymous No. 5	1	\$100
Anonymous No. 6	1	\$200
Association for Childhood Education (Joplin)	1	\$200
Auxiliary Jasper County Medical Society	3	\$200
Bank of Carthage	2	\$200
Russell Belden Memorial	4	\$200
United Missouri Bank of Carthage	1	\$200
Briarbrook Men's Golf Association	1	\$300
Bob Chaplin Memorial	1	\$200
Citizens Bank of Carl Junction	1	\$200
William H. Clark Memorial	1	\$200
Ada Coffey	2	\$150
College Players	1	\$100
Commerce Bank of Joplin	1	\$200
Community National Bank of Joplin	1	\$100
Mr. and Mrs. Harold Cooper	1	\$200
Edna Drummond	7	\$300
Electric Motor Supply	1	\$200
Frederick Eliscu, M. D. Memorial	1	\$470
Empire District Electric Company	10	\$200
Engineering—Math—Physical Science	1	\$200
Exchange Club of Joplin	1	\$300
Fifteenth Street Lumber Company	1	\$200
First National Bank of Sarcoxie	2	\$200
First State Bank of Joplin	1	\$200
Forty and Eight	1	\$ 50
Edna F. Gaither	2	\$200
Burl Garvin	2	\$100
Gilmarbeck Music Scholarship	1	\$200
Mr. and Mrs. Harry Gockel	1	\$200
Joe Harding Supply Company	1	\$200
Robert Higgs Memorial	1	\$200
Mrs. Dorothea Hoover	1	\$200
Henry Hornsby Memorial	1	\$250
Horton Golf Association	1	\$200
C. C. Ivie Memorial	1	\$100
Jasper County Medical Society	2	\$200



## STUDENT PERSONNEL SERVICES

Jasper County Insurance Agents	5	\$200
Freeman Johnson Memorial	5	\$200
Joplin Association of Educational Secretaries	2	\$ 50
Joplin Board of Realtors	2	\$200
Joplin Business and Professional Women's Club	2	\$200
Joplin Downtown Lion's Club	1	\$300
Joplin Federal Savings and Loan	1	\$200
Joplin Furniture Company	1	\$300
Joplin News Company	1	\$100
Joplin Rangeline Lion's Club	1	\$240
Joplin Rotary Anns	2	\$200
Joplin Rotary Club	6	\$200
Joplin White Trucks, Inc.	1	\$250
Joplin V.F.W. Post 544	1	\$200
KFSB—Spiva Memorial	1	\$160
Martin Luther King, Jr. Memorial Scholarship	3	\$500
Kiwanis Foundation of Joplin—International Student Scholarship	1	\$800
Kiwanis, Women of Joplin	1	\$200
KOAM—TV	1	\$200
KODE—TV	1	\$200
KQYX	1	\$200
Arthur Kungle, Sr.	7	\$300
Harry H. Landreth Memorial	1	\$540
Math League	2	\$200
Merchants and Miners Bank of Webb City	1	\$200
Mid-Western Machinery Co.	2	\$200
Midwest Materials Company	1	\$200
Missouri Southern College Alumni	2	\$200
Missouri Southern State College Art League	2	\$ 50
Missouri Southern Faculty Wives	1	\$200
Mitchell-Clayton Memorial	1	\$200
Wm. F. Netzeband Memorial	2	\$175
Newton's Jewelry	1	\$200
Florence Nightingale	1	\$305
Ralph L. Nolan Memorial	1	\$200
Pilot Club of Joplin	5	\$200
Professional Food Management	5	\$100
R. C. Ramsey Memorial	1	\$300
Bobbie Record Memorial	1	\$200
L. R. Reynolds, Jr. Memorial	1	\$200
Security National Bank of Joplin	1	\$200
Wm. H. Sisk Memorial	1	\$100
Soroptimist Club of Carthage	1	\$270
Soroptimist Club of Joplin	1	\$200
Zella F. Spiva Memorial	1	\$200
Harry Spradling Memorial	1	\$200
Dorothy Stephenson Memorial	5	\$200
Student National Education Association—Lloyd Dryer	2	\$100

## STUDENT PERSONNEL SERVICES

Debbie Smith Memorial	1	\$100
Roland Smith, M.D.	1	\$100
Lela A. Smith	1	\$200
Southtown Meat Company	1	\$200
Dan L. Stanley Memorial	1	\$200
George A. Spiva Memorial	1	\$500
St. John's Medical Center Auxiliary	1	\$300
Vera Steininger Memorial	1	\$140
Mrs. Madge A. Sullivan	1	\$200
Dr. A. Paul Thompson	1	\$200
Union Transfer and Storage	1	\$100
Dennis Weaver Scholarship	2	\$250
Webb City—Carl Junction Rotary Club	2	\$200
Webb City Area Jaycee's	1	\$200
Christine Webster Memorial	1	\$200
Welcome Wagon Club	1	\$200
Dr. and Mrs. John Windle	1	\$200

### Basis of Selection:

The scholarships are awarded to the students in the upper ten percent of their graduating classes. The college grants scholarships on the basis of one for each fifty students in a graduating class.

### Missouri Southern State College Patrons' Scholarships

The following scholarships have been made available by interested individuals, service organizations, business firms, industries, and local civic organizations:

## SPECIAL AWARDS

**Edna C. Drummond Memorial Scholarship:** The intent of this scholarship is to give appropriate recognition for academic excellence and for the purpose of assisting students in the science department. The number of scholarships awarded each year varies. Miss Drummond was a former instructor of Joplin Junior College from 1938 to 1955.

**Spencer F. Bartlett Respect Award:** The intent of this award is to give special recognition to a graduating male and female student who has the greatest respect for God, U.S. of America, and has maintained average grades or better while attending Missouri Southern State College. The amount of the award varies each year.



## **STUDENT PERSONNEL SERVICES**

### **PERFORMING AIDS & AWARDS**

Awards are made to individuals who have demonstrated success or high potential in basketball, football, music, dramatics, math, forensic and journalism. These individuals must show satisfactory progress in these college performance areas in order to continue the aid. Applications for performing aids should be made to the director or sponsor of the particular activity.

Basketball Coach

Football Coach

Dramatics Coach

Forensic Director

Director of Math League

Director of Music Activities

Director of the School Paper (Chart)

Director of the School Yearbook (Crossroads)

## **WORK**

### **Student Employment**

The college Student Employment program is a work program set up by the college to assist those students who desire employment while attending school. In this program students may work 15 hours a week while attending classes and up to 40 hours a week during the vacation periods. Preference is given to those students who are qualified to fill the job openings and have had experience in fields related to the job openings. Employment is on campus only.

### **Federal Work-Study Program**

The Federal Work-Study program is a program whereby students who must have a job to help pay for college expenses may be employed by the college or certain other non-profit agencies. Preference must be given students from low-income families. In this program students may work 15 hours a week while attending classes and up to 40 hours a week during summer and other vacation periods when they do not have classes.

## **STUDENT PERSONNEL SERVICES**

### **LOANS**

#### **Nursing Loan**

This program has been established to assist those students who wish to complete requirements for nursing. Maximum amount loaned per year is \$2500. These loans are given at three percent (3% ) interest. Interest begins nine months after the students leaves school. This loan has a cancellation clause. (See Financial Aids Office.)

#### **Law Enforcement Loan**

This program has been established to encourage students to enroll in the Law Enforcement Program. These loans carry an interest rate of seven percent (7% ) with special consideration given to law enforcement officers who are presently employed full-time.

#### **National Defense Student Loans**

High school graduates who are accepted for enrollment at Missouri Southern State College and who need financial assistance to pay enrollment fees and other costs are eligible for student loans. The loans bear no interest until nine months after the student ends his studies. This applies whether the individual remains a student at Missouri Southern State College or transfers to another institution. Nine months after the student ceases his studies the unpaid balance of the loan begins to draw interest at the rate of three percent (3% ) per year. Repayment of the loan may be as low as \$30.00 per month and, depending on the amount of the loan, may be extended over as much as a ten-year period. Repayment of these loans may be deferred up to a total of three years while a borrower is serving in the Armed Forces, with the Peace Corps, or VISTA.

#### **Federally Insured Student Loans**

The Federally Insured Loan Program is administered jointly by the college and various banks and other financial institutions. Under this program a student may borrow from a bank or other financial institution. A student from a family with an adjusted income of less than \$15,000 a year pays no interest while attending an eligible college, business college, or technical or vocational school. Repayment of principal and seven percent



## STUDENT PERSONNEL SERVICES

(7%) interest begins when the student ceases his course of study. Present regulations stipulate that repayment begins between the 9th and 12th month and is normally scheduled for repayment from 5 to 10 years. There is, however, a minimum monthly payment requirement of \$30 that could reduce the number of years for repayment.

### Educational Opportunity Grants

Missouri Southern State College has funds for a limited number of Educational Opportunity Grants. Under this program grants may be awarded to students with exceptional financial needs.

Students who have received EOG funds in prior semesters at Missouri Southern State College or other institutions will be given preference. This type of financial assistance must be matched with other types of aid such as scholarship, work, or loans.

### Small, Short-Term Loans

- David Pearl B'Nai B'Rith Loan Fund

This fund was established in memory of David Pearl, a member of the above fraternal organization.

- Mitchell Loan Fund

This fund was established in memory of Thomas Mitchell.

- Joplin Business and Professional Women's Club Loan Fund

This fund was established to assist students in need.

- Arnold E. Irwin Loan Fund

This fund was established in memory of Mr. Irwin who was a faculty member of Joplin Junior College.

- Patricia Smith Memorial Loan Fund

This loan fund was established in 1969 in memory of a former Missouri Southern State College student by the Joplin Exchange Club and friends.

- Edna F. Gaither Memorial Fund

This fund was established in memory of Edna F. Gaither who was a teacher in the Joplin school system for 50 years.

- Joplin Life Member Club Telephone Pioneers Loan Fund

This fund was established to assist students who need financial assistance for the academic year.

- Joplin Rangeline Lions Club Emergency Loan Fund

This fund was established to help students who have an

## **STUDENT PERSONNEL SERVICES**

emergency. These funds are available immediately and were provided by the Lions Club so that the problems of finance would not be a part of the student's emergency.

### **•Dan Howard Memorial Fund**

This fund was established to assist students in need who are studying in the fields of Nursing, Pharmacy, Optometry, and Medicine.

### **How to Apply For Financial Aid**

1. Complete the admission application form and pay the \$5.00 admission fee.
2. Complete the financial aid application that pertains to the type of aid you are requesting.
3. You are required to file your 7th semester transcript only when you are applying for scholarships. If you are a transfer student, you must submit a transcript from the school you last attended.
4. In order to complete admission requirements, you must send to the admissions office upon graduation your completed 8th semester transcript.

Applicants for financial aid must have completed a satisfactory financial aids program well in advance of each semester's registration and have on file in the Financial Aids Office all application forms.

Applications for Performing Aids and Awards should be made directly to the faculty member in charge of the program.

For further information regarding financial aid write or call:

#### **OFFICE OF FINANCIAL AIDS**

Missouri Southern State College

Newman and Duquesne Roads

Joplin, Missouri 64801

417-624-8100

### **Residence Facilities**

Limited college residence facilities are planned for those who are enrolled as full-time students in Missouri Southern State College.

Two permanent residence halls, one with 212 accommodations for men and one with 112 accommodations for women, are



## **STUDENT PERSONNEL SERVICES**

available. They are located at the heart of the campus near the new College Union, the library, classrooms, and the gymnasium.

The large first floor lounge and recreation areas are the central features of each building. A complete vending machine complex, a library, and study areas are available on the first floor of each of these buildings. Each room will have beds, closets, built-in desks and desk chairs. Coin operated laundry facilities are available in the halls. Private telephones may be installed in each room with the occupants assuming responsibility for the installation charges plus the monthly telephone bill.

### **Contractual Arrangements for Residence Halls**

An application and contract accompanied by a \$40 security deposit fee is required for reservation in a College residence hall. This is a combined contract for room and meals. The \$40 security deposit is forfeited if the contract is cancelled after July 31 for the fall term, or in case of new students, after December 31 for the spring term. The College retains the \$40 as a security deposit as long as the student is in residence and this deposit is not applicable to the housing account. The deposit will be refunded upon termination of the contract if all terms of the contract are fulfilled.

This contract is effective for the entire academic year (fall and spring semesters); or is effective for the remaining portion of the academic year when entered into after the beginning of the fall term.

A student may request cancellation of the contract at the end of a term because of completion of graduation requirements or if an emergency beyond his control necessitates his withdrawal from school. If this request is filed with the Housing Director at least 30 days before the end of the term, and if approved, the deposit may be refunded unless there is a damage charge, outstanding account, or other violation of the contract. Students should refer to contract for detailed terms.

The College reserves all rights in connection with room assignments which are made in the order in which applications are received. Students' preferences are considered, but there can be no guarantee that assignments will be made in accordance

## STUDENT PERSONNEL SERVICES

with the preferences.

The residence halls and food services are operated on a non-profit basis by the College, and the established rates are subject to change by action of the Board of Regents. Twenty meals are served each week.

Residence hall rooms may not be occupied by students earlier than 24 hours before they are required by the College to be in attendance. Students are to vacate rooms 24 hours after the term officially closes.

Reservations in residence halls are not held beyond 36 hours after the student is required to be on campus unless special arrangements have been made with the Housing Director.

The College is not responsible for the loss of, or damage to, any personal property of students. Parents should arrange for insurance coverage of personal property within the framework of their regular household policies.

### Housing and Food Service Rates

The following rates are based on advanced payments for the semester. Payments on any other basis must be approved by the Business Office

	Board and Room Per Semester
Men's Residence Hall	\$425.00
Women's Residence Hall	\$425.00

### College Union

The College Union is a social, cultural, recreational, and service center for student, faculty, and alumni. The activities in this building are planned and directed by the College Union Board.

On the ground floor are located various offices, the bookstore, the lounge, and a snack bar.

The ballroom and special meeting rooms are located on the upper level of the College Union.

The cafeteria, the faculty lounge, and the food service offices are located on the main floor. An elevator connects the three floors.



## **STUDENT PERSONNEL SERVICES**

### **Social Standards**

A student attending Missouri Southern State College is expected to maintain a high standard of moral conduct. Forfeiture of the privilege to attend may result from unsatisfactory conduct. Students are expected to demonstrate maturity in their judgment.

Appropriate dress is expected on the campus during the regular school day.

Missouri Southern State College does not permit the use of alcoholic beverages on campus. Any violation to this rule is subject to disciplinary action.

Smoking is prohibited in the library and in classrooms.

### **Career Counseling and Placement Services**

The Placement Office, usually associated with the task of matching people and jobs, offers an equally important service through career counseling, aiding students in clarifying their educational and vocational objectives. An understanding on the part of the student of his interests, aptitudes, limitations, etc. and a knowledge of the world of work makes matching an individual's qualifications with a job much easier and certainly more gratifying to all parties concerned. Students are invited to use career counseling and placement services early in their pursuit of a formal education.

Although Missouri Southern State College is considered to maintain centralized placement services, the Placement Officer coordinates the functions of his office with other guidance and counseling services available to students on campus. The services more specifically related to finding employment are centered in the Placement Office.

A collection of information folders supplied by major business establishments, industries, governmental agencies and educational institutions are made readily accessible in the Placement Office Library. A record of current information on job opportunities and announcements of on-campus interviews is either posted on bulletin boards or bound in notebook form for student use. Students are invited to visit the Placement Office regularly.

Candidates for graduation must register with the Placement

## **STUDENT PERSONNEL SERVICES**

Office. Registration involves answers only to several basic questions. Since employers usually request credentials of a potential employee before making final judgment on their selection, most graduates will want to develop a set of credentials for the Placement Office files. The Placement Office personnel provide assistance in the development of credentials. Credentials are retained in the Placement Office files indefinitely and may be updated, declared inactive or activated only by the student upon written request.

### **Student Health Center**

A new Student Health Center has just been completed and is now staffed by a part-time physician and a full-time registered nurse. This new facility was designed with the latest health techniques in mind.

The out-patient clinic hours for the 1973-74 school year will be announced in September. No charge will be made for service during these hours but students are expected to pay for drugs, EKG'S, X-rays, ambulance service or minor surgery, except where covered by any insurance the student or his family may have. The College reserves the right to adjust benefits to the students within the limits of the funds made available for the health services through incidental fees paid by students.

### **Student Insurance**

A voluntary accident and sickness insurance plan for students at Missouri Southern State College is available. It is designed as a supplement to the health services already offered to all full-time students through the Health Center. This voluntary insurance program also covers emergencies and provides further protection while the student is away from the campus on weekends or on vacation, including the summer months.

### **Counseling Center**

The Counseling Center is located in the office complex, 300, third floor, Hearnes Hall. The services of the Center are available without cost to Missouri Southern State College



## STUDENT PERSONNEL SERVICES

students.

Assistance is offered the student in dealing with personal, educational and vocational problems which may keep him from making optimum use of his potentialities while in college. A professionally trained counselor will work with the individual to assist him in integrating personal, educational, and vocational aspects of this life into a pattern which is meaningful and satisfying.

### Veterans

The College is approved by the Veterans Administration to offer programs for veterans eligible under the provisions of Public Laws No. 894 and No. 550, and for those attending under the War-Orphans Act: Public Law 634.

### Student Affairs

Opportunities for participating in a wide variety of out-of-class activities are provided at Missouri Southern State College. Students are encouraged to investigate the wide choice of activities and are invited to participate in one or more of these aspects of the College program.

**Student Senate**—The responsibility for student government rests not only with the student officers and student boards and committees but also with each member of the student body. The growth and development of Missouri Southern State College student government will be proportionate to the participation by the students.

The Student Senate serves as the governing body for students and acts as an intermediary between the faculty and student body. Members of the Student Senate gain experience in the functions of a student government and strive to promote the objectives of the Student Body Constitution.

The membership of the Student Senate consists of the Student Body Executive Officers, the officers from each class, and a number of senators representing each class. The student body executive officers for the summer cabinet for the following year are elected late each spring. The class officers and student senators are elected early each fall. Interested students petition and campaign for office.

## STUDENT PERSONNEL SERVICES

**College Union Board**—The activities in the College Union are planned and directed by the College Union Board. The College Union Board, composed of seven students and three faculty members, serves as an advisory board to the College Union Director.

The College Union Board began functioning in September, 1969. The Union Board has four major committees: cultural affairs, forum, recreation and films, and dance. The College Union Director, with the aid and advice of the College Union Board, attempts to provide varied activities for the student body.

Students serving on the College Union Board are elected each spring. Qualified students are urged to file for election to these offices. The Dean of Women, Dean of Men, and one faculty member, appointed by the Dean of Student Personnel Services, complete the ten member board.

## STUDENT ORGANIZATIONS

The College encourages student organizations which provide for the professional, social, academic, divisional, religious, political, or service interest of the students. New organizations may be established when approved by the Student Government and the College Administration.

### Student Government

- Senate
- College Union Board

### Honor Groups

- Alpha Psi Omega
- Phi Theta Kappa

### Classes

- Senior Class
- Junior Class
- Sophomore Class
- Freshman Class

### Religious Organizations

- Baptist Student Union
- Ecumenical Campus Ministry
- Inter-Varsity Christian Fellowship
- Koinonia

### Departmental Groups

- Art League
- Association for Childhood Education
- Auto Technology Club
- Biology Club

### General and Service Organizations

- Afro-American Society
- Alphi Phi Omega
- Campus Girl Scouts
- Chess Club
- Cheerleaders



## STUDENT PERSONNEL SERVICES

Chi Epsilon Phi  
College Players  
Computer Science League  
Epsilon Gamma  
Lambda Epsilon Epsilon  
Mathematics Club  
Modern Language Club  
MSSC Compass Club  
Lettermen's Club  
Psychology Club  
Rho Epsilon Chi (Phys. Ed.)  
Society for the Advancement  
Of Management  
Sociology Club  
Student National Education  
Association  
Student Nurses Association

Circle K Club  
Council on International Relations  
and United Nations Affairs  
(CIRUNA)  
Men's Residence Hall  
MSSC Soccer Club  
MSSC Veteran's Organization  
Rotaract  
Women's Residence Hall  
Young Democrats Club  
Young Republicans Club

### Social Fraternities

Mu Sigma Gamma  
Kappa Alpha

### Social Sororities

Delta Phi Delta  
Delta Gamma

## STUDENT INTERESTS

**Athletics** —Missouri Southern State College, having become a four-year institution as defined by athletic associations, has received membership in the National Association of Intercollegiate Athletics. The college participates in the following intercollegiate activities: basketball, football, track, baseball, golf, and tennis.

To be eligible for participation, students must meet the scholastic requirements of the NAIA.

**The Chart** staff publishes 18 issues of the College newspaper. Throughout the year the editorial division uses the work of many reporters, feature writers, cartoonists, and typists. The business staff offers experience in advertising, salesmanship, and secretarial practices. Those wishing to freelance should attend weekly staff meetings.

**The Crossroads** (The College Yearbook) is produced by a student staff with faculty sponsors. The annual Crossroads Ball is climaxed by the crowning of the Crossroads Queen. Students who work on the yearbook staff receive valuable experience in school publications.

## STUDENT PERSONNEL SERVICES

**Debate** —A forensics program featuring college debate offers opportunities to any student interested in argumentation. An intercollegiate debate team was first organized in the fall of 1970.

**Music** —Participation is available for all qualified students in Choir, Vocal Ensemble, Marching Band, Concert Band, Stage Band, Brass Choir and Orchestra with instructors consent.

**Theatre** —The speech and drama department sponsors four major drama productions in the campus theatre for which all MSSC students are eligible to try-out. Advance announcement is made before each try-out. In addition to the major productions, there are experimental and reader's theatre presentations and performing workshops. Sponsored by the local chapter of Association for Childhood Education and presented by the speech and drama department, a series of children's plays are presented each year at the local junior high schools. Try-outs for these are open to every full time MSSC student in good academic standing.

**The Winged Lion** is a creative arts magazine featuring student contributions in art and literature. This student-edited publication provides a creative outlet for students and is published once each fall and spring semester. Opportunities exist for those interested in editing and publishing as well as in creative contribution.



# ACADEMIC REGULATIONS

## Admissions

### Admission Requirements.

By Graduation from Accredited High Schools.

1. Missouri Southern State College considers for admission all applicants who are graduates of Missouri public high schools. It considers equally those who are graduates of private high schools that have North Central Association accreditation. Students from other high schools may be considered for admission on an individual basis. If the applicant's grades and test scores indicate unpreparedness to do college study, Missouri Southern State College reserves the right to reject the student, or to require him to take college preparatory courses before admission can be considered.
2. A student entering from out of state must rank in the upper two-thirds of his high school graduating class.

By Examination.

1. Applicants not eligible for admission on the basis of graduation from an accredited high school may be considered for admission on the basis of examinations. Arrangements should be made with the Director of Guidance and Testing.

By Advanced Standing (Transfer) from Accredited Colleges.

1. Students applying for admission as transfer students from other collegiate institutions must have official transcripts sent to the Director of Admissions by the Registrar from each institution attended. These transcripts become the property of Missouri Southern State College.
2. Students who are ineligible to return to their last institution will not be admitted to Missouri Southern State College.
3. Students seeking admission from other colleges with 55 transfer credit hours or more, must present a minimum C (2.0 on A=4) average.

## ACADEMIC REGULATIONS

### Credentials Required of Admission

- I. Students with no college experience are required to furnish credentials as follows for admission to the freshman class:
  1. High School Transcript. An official transcript or transcripts of high school credits showing that he has met requirements for graduation.
  2. Application. The application for admission must be completed one week before the first day of registration. (See college calendar, Page 4.) This includes all credentials required by the admissions office.
  3. Application Fee. A fee of \$5.00 with the application for admission. (This fee is non-refundable and non-applicable to other college fees.)
  4. Physical Examination. A certificate of health filled out and signed by both the applicant and his doctor.
  5. Missouri Southern State College will require additional credentials from students whose application credentials raise questions about their acceptability into the student body. While the college makes every effort to give each applicant an opportunity for a college education, it reserves the right to deny admission when the college's ability to meet the need of the student and/or the welfare of the student body are in question.
  6. Students who do not attend Missouri Southern State College within two (2) years after making application, must submit new credentials when seeking admission again.
  7. Admission to Missouri Southern State College does not automatically confer admission to the nursing program. In addition to meeting admission requirements for the college, candidates who are interested in a career in nursing as a Registered Nurse (R.N.) are required to apply for admission to the Department of Nursing. The application form may be obtained from the Department of Nursing Office, Kuhn Hall. Applications should be submitted prior to May 1 preceeding the Fall Semester which you wish to enter. Each application is reviewed by the Admission



## ACADEMIC REGULATIONS

Committee for the Department of Nursing. See Nursing Department, page 129 for full information on admission and acceptance criteria.

8. Veterans who plan to attend under the G.I. Bill of Rights or veterans' orphans under the War Orphans Act must present a certificate of eligibility at the time of registration.
- II. Students transferring from other colleges must present the regular credentials listed above for freshman plus official college transcripts and statements of honorable dismissal from each institution attended after high school graduation.
- III. Former Missouri Southern State College, Junior College of Jasper County, and Joplin Junior College students must inform the Office of Admissions of their intention to return. When necessary, these students will be required to update their credentials.

### Placement Tests .

Scores from the Missouri College English Test (MCET), Missouri Mathematics Placement Test (MMPT), and the School and Ability Test (SCAT). (These tests are administered by colleges throughout the State of Missouri both during the spring and summer of each year. In unusual circumstances the tests may be administered by appointment at Missouri Southern State College.) Frequently, transfer students who have satisfactorily completed one full semester of college study (16 semester hours) or more need not take the placement tests. The College reserves the right, however, to require the taking of the placement tests if it believes it is necessary for the best academic advisement of the student.

### International Students

Students not citizens of the United States, who wish to apply for admission, should write the Director of Admissions, Missouri Southern State College, for the proper application forms and instructions. Three basic concerns apply to international student applicants: (1) Academic competency; (2) Ability to read and speak the English Language adequately for college level study; and (3) Ability to finance the cost of education at Missouri Southern State College. All applicants

## **ACADEMIC REGULATIONS**

from non-English speaking countries must pass the Test of English as a Foreign Language.

### **Transcript of Record**

An official transcript of the student's academic record bears the registrar's signature and the college seal. Missouri Southern State College assumes no responsibility for the accuracy of a transcript after it leaves the registrar's office.

Up to two weeks must be allowed after the close of a semester for the issuance of an up-to-date transcript. The transcript request must be made in writing. Each student is entitled to two (2) free transcripts. Additional copies cost \$1.00 each. No transcript will be issued unless all bills to Missouri Southern State College are paid or are current according to agreement with the business office.

### **Grade Reports**

Grade reports are normally available within one week after the semester closes.

### **Academic Advising**

Academic advising is regarded by the college as an extension of the teaching function and an important responsibility of the faculty. The student also is responsible to study the requirements of his educational program carefully and work closely with his adviser.

Freshman students are advised by counselors of the Student Personnel Services. Those who have or will have completed 29 or more semester hours in their current semester will be assigned to and advised by a subject matter professor at the time he pre-enrolls for the next semester.

### **Course Numbers and Levels**

Course Numbers:

- 0- 99 Not applicable toward baccalaureate degree.
- 100-199 Primarily for freshmen.
- 200-299 Primarily for sophomores.
- 300-399 Primarily for juniors.
- 400-499 Primarily for seniors.

Normally courses numbered 100-299 are considered junior or



## ACADEMIC REGULATIONS

lower division level courses, and those numbering 300-499 are senior or upper division level courses. There are more significant distinctions between the sophomore and junior years than within the levels of the lower and upper divisions.

The student should check the catalog description of the course to see whether the second semester of a sequence course makes the first semester prerequisite.

Freshman are not permitted to take any course above the two hundred level unless qualified by advanced placement tests. The exception is infrequent.

Course numbers ending in "0" may be offered each semester. Those ending in an uneven number (example: 101, 103, etc.) are normally offered the first semester, and those ending in an even number (example: 202, 204, etc.) are normally offered the second semester.

## CLASSIFICATION OF STUDENTS

**Freshman:** 0-28 hours

**Sophomore:** 29-55 hours

**Junior:** 56-89 hours

**Senior:** 90 and above

**Special:** Non-degree students, usually 21 years of age or over, admitted on the basis of maturity and ability, but who fail to meet regular-standing requirements or who plan to study for personal improvement only. These may qualify for regular standing by removing entrance deficiencies and by earning a minimum of C (2.0) average. Normally, there is a 32-hour limit. Credits earned as a special student may apply toward a degree when regular standing is attained and if the credit earned is regularly applicable toward a degree. Students who have attempted a degree program and who have failed to maintain normal progress toward graduation, may at the discretion of the proper college authorities, be directed into non-degree, occupational preparation programs as special students.

**Post Graduate:** Persons having completed a baccalaureate degree but taking courses for purpose of teacher certification, job preparation, an additional degree, or personal profit.

## ACADEMIC REGULATIONS

**Transient:** Students in good standing at other colleges and universities wishing to enroll at Missouri Southern State College for the purpose of transferring back to their institutions the credit earned. Admission requires completion of the application form, payment of the \$5.00 application fee, and a statement of good standing from the Dean or Registrar of the student's home college or university.

**Full-Time:** A student enrolled for 12 or more semester hours.

**Part-Time:** A student enrolled in 11 or less semester hours.

## GRADING SYSTEM

### *Grade Grade Points*

A—Superior.....	4
B—Above Average.....	3
C—Average.....	2
D—Minimum Passing.....	1
F—Failing.....	0
W—Withdrawal.....	0
I—Incomplete.....	0
Au—Audit (registration without credit)	
Cr—Credit (course passed with no specific grade)	

An incomplete must be made up by the end of the next semester or it will automatically be converted into an F. The student is to arrange with his professor the work essential to change the incomplete into a regular grade. Both credit and grade points are suspended until the incomplete (I) is converted to either a passing grade or an F.

A grade point average (GPA) at the end of any semester is the total number of grade points earned divided by the total number of hours attempted.

## HONOR ROLL

**Dean's Honor Roll**—To be placed on the Dean's Honor Roll, the student must be an undergraduate in regular standing and earn a minimum of 3.5 out of a possible 4.0 points on twelve or more semester hours during the fall and/or spring semesters.



## **ACADEMIC REGULATIONS**

### **GOOD STANDING AND ELIGIBILITY**

Students enrolled at Missouri Southern State College are in good academic standing when they meet the normal progress toward graduation as described below. Those falling below the prescribed norm will be placed on academic probation. Persons failing to achieve normal progress toward graduation during the probationary period are subject to academic suspension.

Those students competing in intercollegiate athletics or in organizations representing the college off campus are ineligible to participate in these programs when they fall below the norms set for minimum standards of progress.

### **STANDARDS OF PROGRESS TOWARD GRADUATION**

A student's cumulative grade point average (GPA) is used to evaluate his progress. If the grade point average falls below the minimum standards of progress, his work is considered unsatisfactory.

Progress toward a degree is computed on the following grade point averages:

#### **FOR ASSOCIATE DEGREE CANDIDATES**

<b>Hours Attempted</b>	<b>Grade Point Average</b>
1-17 semester hours	1.5
18-33 semester hours	1.6
34-43 semester hours	1.75
44-55 semester hours	1.9
56 and above	2.0

#### **FOR BACCALAUREATE DEGREE CANDIDATES**

1-17 semester hours	1.5
18-33 semester hours	1.6
34-46 semester hours	1.75
47-62 semester hours	1.8
63-77 semester hours	1.85
78-93 semester hours	1.9
94-107 semester hours	1.95
108 and above	2.0

## **ACADEMIC REGULATIONS**

### **ACADEMIC PROBATION, SUSPENSION AND REINSTATEMENT**

Each student should consider a grade point average of less than 2.0 as a warning.

Those falling below the standards of progress toward graduation will be placed on academic probation. If the grade point average is not raised to the minimum standard of progress during the probationary semester, the student is subject to immediate academic suspension from the college.

A student receiving academic suspension must stay out of Missouri Southern State College one semester. Toward the close of the semester he may apply to the Director of Admissions for reinstatement. This petition must be completed two weeks before the first day of registration for the next semester. The Director of Admissions, within the framework of College policy, will notify the student whether and on what conditions he can be readmitted. Readmission will be considered only in cases where the student can present positive academic evidence that indicates a high probability of future academic success. The grade points needed to reach minimum progress toward graduation must be within the student's capability.

### **REPETITION OF COURSES**

A course in which a student has made a grade of D or F may be repeated only once. The grade and grade points in the first attempt will be cancelled and the second grade will be used in computing grade point averages.

### **STUDENT COURSE HOUR LOAD**

Registration for 12 or more semester credit hours gives full-time standing, and 15 or 16 hours constitutes a normal study load. An average of 15 credit hours for four semesters and 16 for four semesters enables the student to meet the minimum 124 credit hour requirement for a baccalaureate degree in eight semesters (four academic years).

Permission to carry 17 credit hours may be granted if the student's accumulative grade point average is 2.0 or above. In order to carry 18 or more credit hours the student must secure the approval of the chairman of the division through use of a "Petition for Additional Hours." Approval to carry 18 hours or



## ACADEMIC REGULATIONS

more will be considered if the grade point average is 3.0 or more, freshman orientation excluded.

In planning a course load, the student should remember that for each hour of credit two hours of study are required per week. A 16-hour load means that a student is committing himself to a 48-hour academic week: 16-18 hours in class, and 32 hours of preparation. The student should carefully measure the demand on his time for money-earning jobs, extracurricular activities, participation in collegiate sports, drama and musical productions, social activities and other time consuming activities when planning his class schedule.

## CLASS ATTENDANCE

The primary objective of student and professor is the student's attainment of course goals. It is recognized that normally those students who achieve well are regular in class attendance. The professor, when giving a final semester grade, bases his evaluation on how well the student has achieved the course goals.

The student who misses a class does it at his own risk. He must assume the responsibility for work missed because of class absences. Professors are willing to assist students whose absences are caused by valid illnesses, college approved activities, and extenuating circumstances. The professor may require whatever evidence he needs to support the reason for absence. If a student is absent two class meetings more than the credit hours of the course, regardless of the reason, the professor can request that the student be dropped from the course.

Because the attendance record is significant to the total record and useful in guidance and counseling, the professor keeps a record of individual class attendance. When he believes the absences are excessive he will report the fact to the Student Personnel Services and they will in turn counsel with the student. The total number of student absences in a class will be reported to the Registrar's office along with the final grade at the end of the semester.

The student should be aware that absenting himself from class invariably has a built-in penalty of lower academic achievement. Excessive absences usually result in failure to achieve the course goals.



## **ACADEMIC REGULATIONS**

### **CORRESPONDENCE AND EXTENSION**

A maximum of 12 semester hours of credit by correspondence or extension study from approved institutions may be considered for transfer.

### **STATE LEGISLATION REQUIREMENT**

Sections 103373, 10374, 10374a, 10374b, 10374c (S.C.S. for S.B.4) of the Laws of Missouri, 1947 (6th General Assembly), prescribe that all candidates for a degree issued by the colleges and universities of Missouri must have completed courses of instruction in and "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the State of Missouri, and in American History, including the study of American institutions."

Students may comply with the law (1) by completing courses embracing the subject matter specified by the law and receiving credit therein, preferably before admission to senior college work, or (2) by certification of the completion of such requirements in another collegiate institution.

All students who have completed the general education curriculum requirements in Area 2 meet the requirements of Missouri law. Out of state students who do not take Area 2 at Missouri Southern State College must pass a special examination on the new Missouri Constitution.

### **WITHDRAWAL FROM COURSES**

If a student officially withdraws from a course during the first week of classes, no entry will be made on the permanent record. If official withdrawal is made after the first week and before the end of the twelfth week of classes, a mark of W is entered on the record. Withdrawal from a course after the twelfth week results in a grade of F. Exception to the F grade will be considered only on extenuating circumstances beyond the student's control and only by special permission from the Dean of the College.

### **WITHDRAWAL FROM COLLEGE**

Except at the end of a semester or regular school session, any student who withdraws from Missouri Southern State College must obtain a "Withdrawal from School Permit" from the Student Personnel Office. When this form is completely processed, the student will report to the Registrar's Office for



## ACADEMIC REGULATIONS

final withdrawal. If all records are clear, the student is honorably dropped from the College and is eligible to return, subject to minimum standards of progress regulations.

A student who leaves the College without completing the "Withdrawal from School Permit," except at the end of a semester or a regular school session, will not be eligible to re-enter the following semester.

## AUDITORS

With the consent of the chairman of the division and the instructor concerned, a student may be admitted to a course as an auditor. Auditors must be registered and pay fees as a regular or special student. They receive no college credit.

## ADVANCED PLACEMENT

To seek advanced standing or college course credit, the high school applicant must take the **Advanced Placement Examination** of the College Entrance Examination Board in the field of study for which he may qualify. Students who have taken an Advanced Placement course in high School and who have passed the National Advanced Placement Examination in that course at a 3-point level or higher are automatically eligible for placement at the next level of the college sequence and may receive college credit. A **Bulletin of Information for Students** is available through the high school or the College Board Advanced Placement Examinations, Box 592, Princeton, New Jersey 08540.

Students who have been out of high school and have had varied study programs, or who have had college study that needs validating, may ask the Director of Guidance and Testing at Missouri Southern State College for the privilege of taking the **College Level Examination** Tests of Educational Testing Service. The quality of performance on the tests will determine whether advanced standing or credit can be given. Write the Director of Guidance and Testing, Missouri Southern State College, Joplin, Missouri 64801, for details and information on subject matter areas for which tests are available.

## TRANSFER CREDIT

The maximum credit that a student may present from a junior college toward advanced standing is 64 semester hours.



## ACADEMIC REGULATIONS

Upper division courses carrying a grade of D will not be accepted for credit at Missouri Southern State College.

Transfer students must take in residence at Missouri Southern State College a minimum of fifteen credit hours required in the major field of study.

Transfer students must also take the senior year or 30 out of the final 36 hours in residence at Missouri Southern State College.

## DEGREES AND GRADUATION REQUIREMENTS

### Degrees

Missouri Southern State College has two distinct divisions, junior and senior (or lower and upper), both directed by the same Board of Regents, Administrators, and Faculty. Baccalaureate degrees are offered by the senior college division and associate degrees are offered by the lower division.

The baccalaureate degrees offered are the Bachelor of Arts, Bachelor of Science and Bachelor of Science in Education.

The associate degrees offered are Associate of Arts and Associate of Science.

The Certificate of Achievement is offered for one year of successful study in the secretarial-typist curriculum.

The Bachelor of Arts degree is available with majors in art, chemistry, English, history, music, political science, psychology, sociology, Spanish and speech and drama.

The Bachelor of Science degree is available with majors in biology, business administration, chemistry, mathematics, environmental health and medical technology.

The Bachelor of Science in Education degree is available in elementary education, and in the following areas for those planning to teach at the secondary level: Art, biology, business, chemistry, English, foreign language (Spanish), mathematics, music, health, physical education and recreation, physical science, physics, speech and drama, social science (with concentrations possible in history, political science, or sociology).

The Associate of Arts degree is available in pre-agriculture, pre-dental, pre-engineering, pre-journalism, pre-medical, pre-optometry and pre-pharmacy.

The Associate of Science degree is available in accounting,



## ACADEMIC REGULATIONS

automotive technology, computing analysis, cosmetology, data processing and computer programming, drafting and design, electronic data processing coordinator, general business, law enforcement, machine technology, nursing, radiologic technology, environmental health and secretarial science.

### Majors

The subject matter area of concentration is called a major. See paragraphs above for listing of the majors offered. The requirements for each major are explained immediately preceding the course descriptions for each department, beginning with page 74.

### Graduation Honors

In recognition of superior scholarship, the college awards honors to associate degree and baccalaureate degree graduates as follows:

**Associate Degree.** The student must have completed a minimum one half of the hours required for the degree in residence at Missouri Southern State College. The cumulative grade point average required to receive First Honors is 3.75; Second Honors, 3.65; and Third Honors, 3.50.

**Baccalaureate Degree.** Cum Laude is awarded those students who have a cumulative grade point average of 3.3.

Magna Cum Laude is awarded those students who have a cumulative grade point average of 3.7.

Summa Cum Laude is awarded those students who have a cumulative grade point average of 3.85.

Eligibility for any one of the three honors also requires the candidate to study all his junior and senior years at Missouri Southern State College and earn a minimum 60 semester hours of credit.

## REQUIREMENTS FOR GRADUATION

The degree requirements in this catalog, 1973-74, become effective June 1, 1973.

A candidate for a degree may use as a basis for degree requirements the general catalog issued for any year following the date of his first registration in the College, so long as it is not more than five years prior to the date the degree is to be

## ACADEMIC REGULATIONS

conferred. The candidate must have been in residence during the year of the catalog selected.

### Baccalaureate Degrees

**Residence**—The student must have earned thirty out of the final thirty-six semester hours in residence at Missouri Southern State College. (This regulation does not apply to three-one affiliation programs.)

**Credit Hours**—At least one hundred twenty-four semester hours of college credit applicable to a baccalaureate degree are required to qualify for graduation.

**Grade Point Average**—A 2.0 cumulative grade point average on all credit hours attempted is required. The courses making up the major field of study must also carry a 2.0 or above. See the Department of Education for the special requirements in the Teacher Education Program.

**Upper-Division Hours**—A minimum of forty semester hours in upper division courses (those with numbers in the 300's and 400's) must be presented to meet the graduation requirements. Reasonable adjustments are made for three-one affiliation programs.

**Time of Graduation**—A student may complete graduation requirements at the close of any semester. Formal announcement of graduation is made and degrees are conferred at the close of the spring semester and summer session. All students completing graduation requirements since the preceding commencement are expected to participate in the commencement activities.

**Major Field**—A minimum of 12 upper division credit hours must be earned in the major field. The grade point average for courses making up the major must be 2.0 or above. A minimum of 15 semester hours must be taken at Missouri Southern State College.

**Placement Services**—Each degree candidate must register in the Placement Office.

**Degree Candidacy Application**—Each student must make application for degree candidacy when pre-registering for his final semester in the school year in which he is to receive his degree. The application form is available in the office of the Registrar.



## ACADEMIC REGULATIONS

**Educational Methods Course**—These courses, including student teaching, are applicable only to the Bachelor of Science in Education degree.

**Correspondence and Extension Credit**—A maximum of twelve semester hours of correspondence and extension credit may be considered for admission to the degree.

**State of Missouri Requirement** —All candidates for a degree must satisfactorily complete a course in United States History including a study of institutions and national and state governments. This requirement may be satisfied by History 110, or 120, or Political Science 120. Education majors must take History 110 and 120.

## GENERAL EDUCATION REQUIREMENTS

Missouri Southern State College has a program of General Education that contributes toward the development of the whole person, as an individual and as a member of society.

To accomplish this goal, the student pursues a carefully planned and correlated program of courses. The courses selected to fulfill the General Education requirements:

- a. improve skills of communication and mathematical proficiency;
- b. give an understanding of leading intellectual ideas of western civilization;
- c. create an appreciation of our cultural and political heritage;
- d. emphasize responsibility as a citizen;
- e. aid in the development of creative and independent thought and expression;
- f. provide knowledge and understanding of the physical universe;
- g. develop awareness of the importance of health and physical fitness; and
- h. afford experiences conducive to the development of strong character and personality.

# ACADEMIC REGULATIONS

## BACCALAUREATE DEGREE

Area 1. Basic Skills		Credit Hrs. Required
1. English 101-102, English Composition		6 hours
Select one:		3 hours
Speech 100, Speech Techniques	3	
Speech 101, Argumentation — Debate	3	
Speech 310, Business & Professional Speech	3	
Speech 211, Discussion Techniques	3	
Select one:		3 hours
2. Math 110, Introduction to College Math 1	3	
Math 130, College Algebra	3	
Total for Area 1		12 hours

1. Students who qualify for Eng 111 satisfy the composition requirement with this course.
2. Higher level mathematics courses also satisfy this requirement.

Area 2. Social Sciences		Credit Hrs. Required
History 110 or 120, History of United States		3 hours
1. Psychology 100, General Psychology		3 hours
Political Science 120, Government: National, State, Local	3	3 hours
Select one:		3 hours
History 200, Western Civilization	3	
History 201 or 202, Modern European History	3	
History 331, Economic History of U.S.	3	
Economics 201, Principles of Economics	3	
Geography 211, Regions and Nations	3	
Geography 222, Economic Geography	3	
Sociology 110, Introduction to Sociology	3	
Total for Area 2		12 hours

1. Education and Psychology majors should substitute Psy 110, Psychology of Human Development for this requirement.



## ACADEMIC REGULATIONS

Area 3. Humanities and Fine Arts	Credit Hrs. Required
Any 6 hours of literature courses for which the student is qualified.	6 hours
Select one:	3 hours
Art 110, Introduction to Art 3	
Music 110, Music Appreciation 3	
Drama 110, Theatre Appreciation 3	
Philosophy 201, Introduction to Philosophy 3	
<b>Total for Area 3</b>	<b>9 hours</b>

Area 3 Note: Students taking the Bachelor of Arts degree must receive credit for two college semesters of the same foreign language in addition to the 9 hours indicated above. The foreign language requirement for the Bachelor of Arts degree can be fulfilled by any of the following methods:

1. By passing appropriate examinations a student may exempt all or part of the requirement and receive college credit for the hours exempted.
2. A student who does not elect option one but who wishes advanced placement may fulfill the requirement with from 6-8 credit hours of courses.
3. Any student may fulfill the requirement by completing the 101-102 sequences, 10 credit hours.

Advanced placement shall not waive the two semester language requirement for all A.B. degree candidates.

Area 4. Natural Sciences	Credit Hrs. Required
Select one:	5 hours
Biology 100, General Biology 5	
Or any five hour course in Biology 5	
Select one:	5 hours
Physics 100, Fundamentals of Physical Science 5	
Or any five hour course in Chemistry or Physics 5	
<b>Total for Area 4</b>	<b>10 hours</b>

## ACADEMIC REGULATIONS

Area 5. Health and Physical Education	Credit Hrs. Required
1. HPER 101-102, Introduction to Physical Activity	2 hours
2. HPER 160, Personal Health Or 2 additional hours of activity courses may be substituted for HPER 160	2 hours
<b>Total for Area 5</b>	<b>4 hours</b>

Total general education credits required—47.

(A.B. degree candidates add foreign language credit, making total general education credits to be 53-57 for that degree.)

1. Physically restricted students may take HPER 100.
2. Education majors must take a health course, either HPER 160 or HPER 370.

All freshmen must enroll each semester in English and Physical Activity until the general education requirements in these areas are fulfilled.

A qualified student may substitute a more advanced course in any area above with the permission of the department responsible for the general education course.

## ASSOCIATE OF ARTS DEGREE

**Credit Hours**—A minimum sixty-two semester hours must be completed.

**Residence**—The last fifteen semester hours must be completed in residence at Missouri Southern State College.

**Grade Point Average**—Minimum cumulative and major field grade point average must be 2.0.

**Major Field**—The student must meet the course requirements of the particular pre-professional program he selects. Or, the degree may consist of the general education courses plus additional hours adding up to 62, as approved by the adviser and the dean of the college.

**General Education Requirements**—The degree requires completion of the general education requirements which are:



## ACADEMIC REGULATIONS

Area 1. Basic Skills	Credit Hrs. Required
1. English 101-102, English Composition	6 hours
Select one:	3 hours
Speech 100, Speech Techniques	3
Speech 101, Argumentation & Debate	3
Speech 211, Discussion Techniques	3
Select one:	3 hours
Math 110, Introduction to College Math 1	3
2. Math 130, College Algebra	3
<b>Total for Area 1</b>	<b>12 hours</b>

1. Students who qualify for Eng 111 meet the composition requirements with this course.
2. Higher level mathematics courses also satisfy this requirement.

Area 2. Social Sciences	Credit Hrs. Required
History 110 and 120, History of United States	6 hours
Select one:	3 hours
Political Science 120, Government: National, State, Local	3
History 200, Western Civilization	3
History 202, Europe 1815 to Present	3
Geography 211, Regions and Nations	3
Geography 222, Economic Geography	3
Psychology 100, General Psychology	3
Sociology 110, Introduction to Sociology	3
Economics 202, Principles of Economics	3
<b>Total for Area 2</b>	<b>9 hours</b>

Area 3. Humanities and Fine Arts	Credit Hrs. Required
Any 3 hours of literature courses for which the student is qualified.	3 hours
Select one:	3 hours
Music 110, Music Appreciation	3
Art 110, Introduction to Art	3
Drama 110, Theatre Appreciation	3
Philosophy 201, Introduction to Philosophy	3
<b>Total for Area 3</b>	<b>6 hours</b>

## ACADEMIC REGULATIONS

Area 4. Natural Sciences	Credit Hrs. Required
Any biological or physical science	5 hours
<b>Total for Area 4</b>	<b>5 hours</b>

Area 5. Health and Physical Education	Credit Hrs. Required
Select one:	2 hours
HPER 101-102, Introduction to Physical Activity 2	
HPER 160, Personal Health 2	
<b>Total for Area 5</b>	<b>2 hours</b>

Total general education credits required—34.

## ASSOCIATE OF SCIENCE DEGREE

**Credit Hours**—A minimum of sixty-two semester hours must be completed.

**Residence**—The last fifteen semester hours must be completed in residence at Missouri Southern State College.

**Grade Point Average**—The minimum cumulative and major field grade point average must 2.0.

**Major Field**—The student must meet the course requirements in the particular program of study he selects as approved by his adviser.

**General Education Requirements**—The degree requires completion of the general education courses as well as those outlined in his major field of study. The general education required courses are:

Area 1. Basic Skills	Credit Hrs. Required
1. English 101, English Composition	3 hours
Select one:	3 hours
2. Math 20 and 30, Programmed Course in Beginning and Intermediate Algebra 3	
Math 110, Introduction to College Mathematics 3	
3. Speech 100, Speech Techniques 3	3 hours
<b>Total for Area 1</b>	<b>9 hours</b>

1. Students who qualify may take Eng 111 to meet this requirement.
2. Higher level mathematics courses also satisfy this requirement.



## ACADEMIC REGULATIONS

		Credit Hrs. Required
<b>Area 2. Social Sciences</b>		
Select one:		3 hours
History 110 or 120, History of the U.S.	3	
Political Science 120, Government: National, State, Local	3	
Select one:		3 hours
Sociology 110, Introduction to Sociology	3	
Sociology 152, Introduction to Anthropology	3	
Psychology 100, General Psychology	3	
<b>Total for Area 2</b>		<b>6 hours</b>
<b>Area 3. Humanities and Fine Arts</b>		
		Credit Hrs. Required
Select one:		3 hours
Drama 110, Theatre Appreciation	3	
English 120, World Masterpieces	3	
English 210, English Literature	3	
Philosophy 201, Introduction to Philosophy	3	
Music 110, Music Appreciation	3	
Art 110, Introduction to Art	3	
<b>Total for Area 3</b>		<b>3 hours</b>
<b>Area 4. Natural Sciences</b>		
		Credit Hrs. Required
Select one:		5 hours
Biology 100, General Biology	5	
Physics 100, Fundamentals of Physical Science	5	
Chemistry 100, Introductory Chemistry	5	
<b>Total for Area 4</b>		<b>5 hours</b>
<b>Area 5. Health and Physical Education</b>		
		Credit Hrs. Required
Select one:		2 hours
1. HPER 101-102, Introduction to Physical Activity	2	
HPER 160, Personal Health	2	
<b>Total for Area 5</b>		<b>2 hours</b>

1. Physically restricted students may take HPER 100.  
Total general education credits required—25.

# THE CURRICULUM

## DIVISIONAL ORGANIZATION AND OBJECTIVES

The college is organized into four divisions three of which have a chairman as its executive. The fourth is directed by an associate dean. The divisions are subdivided into departments. The divisions and departments are under the administrative supervision of the Dean of the College.

The divisional objectives and programs are as follows.

**I. Division of Business Administration** (Departments of accounting, economics and finance, general business, marketing and management, and office administration):

(1) Preparing individuals to enter the business community and perform effectively and responsibly in the diversified areas of industry, commerce and government; (2) Preparing individuals for positions of responsibility and leadership; (3) Preparing individuals to teach business subjects on the secondary level; (4) Provide a background sufficient to successfully pursue advanced degrees in the diversified areas of business.

It is the primary purpose of the Division of Business Administration to continuously develop and improve the caliber of instruction, programs, and courses which will achieve these objectives and, thereby, fulfill the educational needs and goals of the individuals previously mentioned.

The Division of Business Administration offers two baccalaureate degrees—the Bachelor of Science in Business Administration (three approaches: Accounting, General Business, Marketing and Management) and the Bachelor of Science in Education with a major in business (two plans). In addition, several short-term business programs are offered; they are described under Pre-Professional and Technical Curricula.

**II. Division of Education and Psychology** (departments of elementary education, secondary education, health, physical education and recreation, and psychology):

The programs of this division are designed to reflect the following general aims:

(1) To prepare persons who demonstrate by their behavior the professional, social, emotional, and intellectual maturity



## **DIVISIONAL OBJECTIVES**

necessary to perform effectively as elementary and secondary school teachers; (2) To prepare persons who display a meaningful philosophy of living and a dedication to service; (3) To prepare persons who indicate in their daily lives a concern for and knowledge of good physical and mental health; (4) To teach creative and beneficial leisure-time activities that will serve the student throughout life; (5) To prepare persons with a degree of understanding in the area of psychology which is necessary to perform well as a graduate student or to be of service to society in a service vocation.

The Division provides specific course work leading to the degrees of Bachelor of Science in Education and the Bachelor of Arts with a major in psychology. More specifically the Department of Education is responsible for the teaching and coordinating of the professional education sequence in the Bachelor of Science in Education degree. It also administers the major programs in elementary education and special education. The department of Health, Physical Education and Recreation serves the basic requirements for all college students, provides a major in professional physical education, and provides minors in driver education instruction and athletic coaching. The Department also supervises the women's and men's intramural sports programs.

### **III. Division of Arts and Sciences:**

#### **Objectives of Departments of art, language and literature, music and speech and drama**

These departments comprise those areas of learning in which the student is made aware of some of mankind's greatest thought and noblest art. Through the study of art, journalism, language, literature, music, philosophy, speech, and drama, the student enlarges his capacity to express himself and at the same time develops his ability to comprehend and appreciate the creative efforts of others.

These departments are concerned with creative self-expression, although distinct in that each is a specific discipline or area of study.

A. Viewed in relation to the total college curriculum, the functions of the departments are twofold:

1. General Education—Certain courses offered in every area of Humanities and Fine Arts are especially designed to make



## THE CURRICULUM

available to each student skills and understanding which greatly add to his personal development, regardless of his specialization. (a) Through courses in English and speech he will increase his ability to read, write, and speak his own language and deepen his understanding of its literature. (b) By studying foreign languages, he will learn to communicate with people of other nations and to appreciate the intellectual contributions of cultures other than his own. (c) Through participation in drama, he will develop poise and power of oral expression. (d) In a guided study of the masterpieces of music and art, he will learn to enjoy and appreciate world treasures. (e) In philosophy, he will become familiar with the problems of knowledge, the natural world, and society, and with the quest for the good life.

2. Major or Area of Concentration—To achieve a high level of competency in his special interests, a student elects an area of concentration. (a) Programs in art, English, foreign languages, speech, drama, and music form major areas for candidates for the Bachelor of Science in Education degree. (b) A lesser concentration in several of these areas is required for a Bachelor of Science in Education degree with a major in elementary education. (c) Students not planning to teach but desiring competency in an area may elect to receive a Bachelor of Arts degree for personal enrichment or as preparation for graduate study.

B. In addition to curricular functions, the departments exert a strong influence upon the cultural life of the college and community.

1. The musical and dramatic performing organizations offer opportunities for participation to all qualified students, thus serving as a valuable outlet for aesthetic self-expression.

2. The regular publication of the college newspaper, The Chart, not only provides practical experience for students interested in journalism, but also serves the college community and alumni with reports of college activities.

3. A creative arts publication written and edited by MSSC students, under the sponsorship of the Language and Literature and Fine Arts Departments, serves the dual purpose of providing an outlet for artistic and literary expression and practical experience in the editorial functions associated with publishing. Through this medium, young writers and artists may not only gain experience in the development of their talents, but



## **DIVISIONAL OBJECTIVES**

also enrich the cultural resources of the college community. This is an opportunity that they and their editors have for speaking to and for the other students, and, at the same time, for interesting, entertaining, and influencing all at MSSC.

4. Displays of art works by students and faculty in the Art Gallery and in the exhibits sponsored by Spiva Art Center, housed in the Gallery, stimulate the artistic community.

5. The services of members of the faculty of all departments to community organizations—professional, cultural and civic—aid in acquainting the public with the programs of the college.

### **Objectives of departments of biology, chemistry, geology, mathematics, and physics**

To support the purposes and objectives of the college by correlating the various departments of science and mathematics in order to aid the student to: (a) become more knowledgeable about the biological and physical aspects of the earth and universe; (b) understand and use the scientific method; (c) gain a comprehensive understanding of subjects for teaching (if teaching is the goal); have a broad base of learning and understanding, regardless of the major field of study selected, through general education courses. The division also meets needs of students preparing for engineering, dentistry, medical technology, medicine and nursing.

### **Objectives of departments of geography, history, political science, and sociology**

The purposes are to provide the student with the skill, attitudes, and understanding necessary to give life direction and meaning; to encourage the student to think and to evaluate the broad issues of life; and to stimulate his acquiring new interests that he may pursue for the sheer pleasure of learning.

The division has a special concern in the preparation of social science teachers for the schools of Missouri and the undergraduate education of students who are planning careers in government and community service.

The objectives of the division are:

1. To prepare students for certification as social science



## THE CURRICULUM

teachers in the elementary and secondary schools.

2. To provide the undergraduate education needed for students desiring to continue graduate work in history, political sciences or sociology.
3. To provide a program of extracurricular activities that aid in introducing the student to his future role of service to community and nation.

**IV. Division of Technology** (departments of automotive technology, aviation, computer science, cosmetology, drafting and design, law enforcement, health administration, machine technology, nursing, and radiologic technology) :

(1) To provide opportunity for post-high school education for students seeking skills preparing them for employment. (2) To give both specialized instruction and general education in sufficient balance to prepare for living as well as working in society. Students enrolling in the specialized courses of this division should know that many of them may not be applicable toward a baccalaureate degree if he should later decide to seek it.

### COURSE NUMBERING SYSTEM

Missouri Southern State College has adopted a course numbering consistent with a national system and designed for computer processing. In this system there are listed large areas of knowledge and training, and within each area there are subdivisions. Missouri Southern is using a seven-digit number, such as 0502-101. The number 05 identifies the large area of Business Management. The number 02 identifies a subdivision of accounting. The first four numbers, then, are the new standardized national system of numbering, and the last three numbers are Missouri Southern's system of numbering her individual courses within each department.

Below are two lists: First, the list of the large divisions available at Missouri Southern. Second, the list of the departments with their symbols and numbers.

#### Large Academic Divisions of Knowledge and Training [Baccalaureate Degree Level]

04 Biological Sciences	12 Health Professions
05 Business and Management	15 Letters
06 Communications	17 Mathematics
08 Education	19 Physical Sciences
10 Fine and Applied Arts	20 Psychology
11 Foreign Languages	22 Social Sciences



## DIVISIONAL OBJECTIVES

### Technological and Occupational Curriculums [Associate Degree Level]

- |   |  |
|---|--|
| 50 Business and Commerce Technologies           | 53 Mechanical and Engineering Technologies |
| 51 Data Processing Technologies                 | 54 Natural Science Technologies            |
| 52 Health Services and Paramedical Technologies | 55 Public Service Related Technologies     |

### DEPARTMENTS, THEIR SYMBOLS, AND THEIR NUMBERS AT MSSC

- |  |   |
|--|---|
| Accounting (Acct) 0502   | History (Hist) 2205   |
| Art (Art) 1002, 03   | Journalism (Jour) 0602  |
| Automotive Technology (Auto) 5306  | Law Enforcement (LE) 5505                                     |
| Aviation (AV) 5302   | Machine Technology (MT) 5315                                  |
| Biology (Bio) 0401 to 0499   | Marketing and Management (MM) 0509                            |
| Business, General (GB) 0501, 03, 06, 99                                  | Mathematics (Math) 1701, 02, 03, 99                           |
| Chemistry (Chem) 1905, 06, 07, 08, 99                                    | Music (Mus) 1004, 06  |
| Computer Science (Comp) 5101, 02, 03, 04                                 | Nursing (Nur) 5208  |
| Cosmetology (Cos) 5013   | Office Administration (OA) 0514                               |
| Drafting and Design (DD) 5303, 04  | Philosophy (Phil) 1509  |
| Economics (Econ) 0517  | Physical Education, Health,<br>Recreation (HPER) 0835, 36, 37 |
| Education (Educ) 0802, 03, 10, 11, 16, 17,<br>21, 27, 29, 30, 33, 34, 99 | Physics (Phys) 1901, 02                                       |
| English (Eng) 1501, 02, 03, 99   | Political Science (PSc) 2207                                  |
| Foreign Language:  | Psychology (Psy) 2001, 02, 05, 06,<br>09, 10, 11, 22, 99      |
| French (Fren) 1102   | Radiologic Technology (RT) 5207                               |
| German (Ger) 1103  | Sociology (Soc) 2208  |
| Spanish (Span) 1105  | Speech and Drama:   |
| Geography (Geog) 2206  | Drama (Dr) 1007   |
| Geology (Geol) 1914  | Speech (Spch) 1506  |
| Health Facilities Administration (HA) 5218                               |   |
| Environmental Health Technology (EHT)                                    |   |
| (4-Yr.) 1299   |   |
| (2-Yr.) 5408   |   |

# **COURSES OF INSTRUCTION**

## **ACCOUNTING**

### **Division of Business Administration**

Finke, Goode, Gray, Stengel, Stone, Worthington

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree with the Accounting approach. In the same place find the requirements for the Bachelor of Science in Education degree with a Business Education major.

The requirements for the Technology Programs leading to Certificates of Achievement and Associate of Science degrees are found on page 156.

**0502-101—Elementary Accounting** 3 hrs. cr.

Fundamental principles of accounting as applied to modern business practice. Analysis of balance sheets and income statements. Prerequisite or corequisite GB 101.

**0502-102—Elementary Accounting** 3 hrs. cr.

Continues Accounting 101 with emphasis on corporation accounts. Prerequisite or corequisite GB 101.

**0502-211—Cost Accounting** 3 hrs. cr.

Study of accounting control with management emphasis as applied to industrial enterprise. Special emphasis on product costs and cost systems. Prerequisite: Acct 102.

**0502-212—Intermediate Accounting I** 3 hrs. cr.

A continuation of corporation accounting including a detailed study of the fundamental process with emphasis on current assets, current liabilities, and noncurrent investments. Prerequisite: Acct 102.

**0502-301—Intermediate Accounting II** 3 hrs. cr.

A continuation of corporation accounting, including noncurrent balance sheet accounts (tangible and intangible assets, long-term liabilities, and stockholders' equity) and special statements and analyses. Prerequisite: Acct 212.

**0502-302—Advanced Accounting** 3 hrs. cr.

Application of accounting principles to partnerships, installment and consignment sales, receiver's accounts, estates and trusts, and consolidating statements. Prerequisite: Acct 301.

**0502-401—Tax Accounting** 3 hrs. cr.

Procedures for reporting federal income taxes with emphasis on income and deductions for individuals. Practice is given in preparing federal income tax returns. Prerequisite: Acct 102 or permission. (See General Business 401.)



## **ART**

### **0502-411—Auditing**

**3 hrs. cr.**

The procedures involved in preparing an audit of the various accounts of a business enterprise. Prerequisite: Acct 301.

### **0502-491—Internship in Public Accounting**

**3 hrs. cr.**

Selected senior accounting students serve an internship of approximately six weeks as junior accountants on the staff of practicing certified public accountants. The program is supervised by the faculty. An oral and written report is required. Prerequisites: Acct 301, 401, 411, and/or consent of the internship committee.

### **0502-498—Seminar in Accounting**

**1-3 hrs. cr.**

A seminar for upper division accounting or related majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission.

### **0502-499—Independent Study in Accounting**

**1-3 hrs. cr.**

Individually directed readings, research, and discussions in selected areas of accounting for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission.

## **ART**

### **Division of Arts and Sciences Department of Art**

**Cole, Dishman, Fowler, Hess**

A major for the Bachelor of Arts degree includes 32 required credit hours plus 18 hours of art electives approved by student's advisor. Required art courses are: Art 100, Art 121, Art 131, Art 132, Art 211, Art 230, Art 232, Art 301-302, Art 312, and Art 490.

A major for the Bachelor of Science in Education degree with one teaching field consists of 32 credit hours plus 15 hours of art electives approved by the student's advisor. Required art courses are: Art 100, Art 121, Art 131, Art 211, Art 220, Art 132 or 230, Art 232, Art 301-302, Art 312 and Art 490. A student wishing to certify to teach art as one of two teaching fields must complete 36 hours. See page 97 for teacher education requirements.

### **1002-100—Art Composition**

**3 hrs. cr.**

Introductory course using fundamental techniques and media, including art practice and theory.

### **1003-110—Introduction to Art**

**3 hrs. cr.**

A general survey course designed to increase appreciation of visual art.

### **1002-121—Ceramics**

**3 hrs. cr.**

Methods and techniques of hand building are studied with application to modeling and throwing clay forms. Prerequisite: Art 100 or 110.

## **COURSES OF INSTRUCTION**

### **1002-131—Drawing Techniques**

**3 hrs. cr.**

Free-hand drawing problems using various drawing tools and techniques used by master artists. Prerequisite: Art 100.

### **1002-132—Introduction to Design**

**3 hrs. cr.**

Foundation course using problems involving art principles and elements.

### **1002-200—Arts and Crafts**

**3 hrs. cr.**

General crafts course involving leather tooling, block printing, pottery, weaving and some graphics. May be taken by non-art majors.

### **1002-205—Beginning Jewelry and Silversmithing**

**3 hrs. cr.**

A general introduction to jewelry casting, soldering, and finishing metals. Prerequisites: Art 100 and Art 132.

### **1002-211—Sculpture Techniques**

**3 hrs. cr.**

Study of various sculptural problems and techniques in stone, clay, wood, and mixed media. Prerequisite: Art 100, 121.

### **0831-220—Art Education**

**3 hrs. cr.**

Course designed to develop understanding of the problems in teaching art with emphasis on methods of teaching various art problems. Required for all Elementary Education Majors.

### **1002-230—Basic Form**

**3 hrs. cr.**

Study of relationships of parts to form. Problems include two and three dimensional. Prerequisite: Art 100.

### **1002-232—Painting**

**3 hrs. cr.**

Procedures, techniques, and fundamentals of painting, media—oil, watercolor, and mixed. Prerequisite: Art 100 and 131.

### **1002-300—Drawing**

**3 hrs. cr.**

Self exploration of various drawing elements including artistic anatomy, composition, structure, and aesthetics. Prerequisite: Art 100, 131, or approval of the instructor.

### **1003-301—Art History**

**3 hrs. cr.**

Survey of the development of man's artistic endeavors from Stone Age to the Early Renaissance.

### **1003-302—Art History**

**3 hrs. cr.**

Continuation of 301 from the Early Renaissance in Italy to the present art styles.

### **1002-310—Watercolor**

**3 hrs. cr.**

Technical and aesthetic understanding of watercolor with various subject matters encouraged. Prerequisite: Art 131.



## **AUTOMOTIVE TECHNOLOGY**

### **1002-312—Graphics**

**3 hrs. cr.**

Initial laboratory exercises in various graphic processes—etching, engraving, block print, and lithography. Prerequisite: Art 131.

### **1002-321—Sculpture**

**3 hrs. cr.**

Various media (plastic, metal, clay, mixed) are chosen by the student for investigation.

### **1002-322—Sculpture**

**3 hrs. cr.**

Continuation of 321. Prerequisite: Art 211 and 312.

### **1002-401—Painting**

**3 hrs. cr.**

The student selects an individual problem for investigation. Techniques, history, and painting methods of acrylic or oil paintings are surveyed for understanding. Prerequisite: Art 232.

### **1002-407—Advanced Ceramics**

**3 hrs. cr.**

Advanced methods, techniques, and procedures of pottery making and design in clay. Prerequisite: Art 121.

### **1002-412—Commercial Art**

**3 hrs. cr.**

Lettering, layout, and design techniques. Survey of various reproductive processes. Prerequisite: Art 131, 230, and 232.

### **1002-421—Head Study**

**3 hrs. cr.**

Fundamental methods in portraiture. Various drawings and painting media for structure of the head. Artistic head anatomy used for each head study. Prerequisite: Art 131 and 232 or 300.

### **1002-498—Seminar in Art**

**3 hrs. cr.**

Student art problems investigated with group participation. Class meets twice weekly with Department Head to discuss student findings. Requirements: research papers and oral presentations of investigated problems. Prerequisite: 20 credit hours in art.

### **1002-490—Senior Studio**

**2 hrs. cr.**

Special study in any art media or technique chosen by the student. Requirements: (1) Art survey paper, (2) Senior art exhibit, (3) Oral presentation. Prerequisite: Senior standing.

## **AUTOMOTIVE TECHNOLOGY**

### **Division of Technology**

**Adams, Mason**

The major emphasis in Automotive Technology is specialization in automotive service and business management. The training also provides the background for entry into a general automotive repair or specialized field where a technical knowledge of machines, tools and testing equipment

## **COURSES OF INSTRUCTION**

is required.

The curriculum is college oriented. Students are regular members of the campus body and are expected and encouraged to participate in extracurricular activities.

The Associate of Science degree in Automotive Technology requires the completion of the General Education courses (see page 64) plus the following: Auto 100, Auto 110, Auto 120, Auto 130, Auto 190, Auto 200, Auto 220, Auto 250, Auto 260, and DD 110.

### **5306-100—Automotive Engine**

**5 hrs. cr.**

A beginning course in theory and practical mechanics of the Internal Combustion Engine. Emphasis is placed on the physics and chemistry of combustion as related to engineering principles. Students work in the laboratory shops with engines to learn mechanical relationships and usage of tools and gauging instruments. Three one-hour lectures; 12 hours laboratory per week.

### **5306-110—Technical Mathematics**

**3 hrs. cr.**

Review of basic mathematics, algebra, and the functional concepts of trigonometry. Includes use of tables and graphic methods of solving problems with emphasis on application to problems in applied fields. Daily. Prerequisite: Math 20-30.

### **5306-120—Automotive Electrical and Emission Control**

**5 hrs. cr.**

A beginning course in electricity, basic automotive ignition systems, fuels and lubricants, production and testing. Emphasis is on electrical fundamentals as related to spark ignition and carburetion principles. Laboratory periods provide opportunity to learn mechanical relationships of parts in carburetors, starters, generators, regulators and relays, and distributors. Three one-hour lectures; 12 hours laboratory per week.

### **5306-130—Automotive Business Management**

**3 hrs. cr.**

A basic accounting cycle with emphasis on recording transactions affecting cash, sales, purchases, and the preparation of financial statements. Three one-hour lectures.

### **5306-150—Automotive Theory and Mechanics**

**3 hrs. cr.**

A course designed to acquaint the student with theoretical and practical knowledge of the basic functions and care and maintenance of the various automotive systems and common accessories. Laboratory periods provide students the opportunity to learn common diagnostic techniques and to make non-technical corrections of the more commonly occurring automotive malfunctions. Basic safety inspections will be emphasized. Suggested as an essential course for all students obtaining certification as instructors of driver education and as an elective course for any student who wishes to increase his or her knowledge about the automobile. Two one-hour lectures; one two-hour laboratory per week.



## **BIOLOGY**

### **5306-190—Technical Science**

**4 hrs. cr.**

Graphical and mathematical analysis of forces, laws of motion machines, mechanical power, fluid mechanics, and fastening devices as related to basic machine design. Course work places emphasis on applied problems. Three one-hour lectures; one two-hour laboratory. Prerequisite: Auto 110 or Math 140 and Math 100 with minimum grades of C.

### **5306-200—Automotive Chassis, Brakes and Transmission**

**5 hrs. cr.**

A study of the design, operating principles and service procedures of the chassis suspension system, brakes and drive line of the modern motor vehicle. The laboratory emphasizes the diagnosis and service of these components. Three one-hour lectures; 12 hours laboratory per week.

### **5306-220—Automotive Refrigeration and Air Conditioning**

**3 hrs. cr.**

The course familiarizes the student with automotive air conditioning installation and thermodynamic principles. Students service units on and off the vehicle and study problems related to heat transfer and cooling. Two one-hour lectures; 4 hours laboratory per week.

### **5306-250—Automotive Body and Paint**

**5 hrs. cr.**

A study of the methods of auto body construction, repair, refinishing processes and materials. The laboratory provides the students with the opportunity to repair various types of body damage and experiment in the use of the various types of repair and refinish materials. Three one-hour lectures; 12 hours laboratory per week.

### **5306-260—Auto Service Management**

**5 hrs. cr.**

The principles of shop design, personnel and production management, and industrial safety. The laboratory provides the student with the opportunity to gain additional experience in the area he chooses to specialize. Three one-hour lectures; 12 hours laboratory. Prerequisite: Auto 100, 120, 200, and 220 with minimum grades of C.

## **BIOLOGY**

### **Division of Arts and Sciences**

#### **Department of Biology**

Gibson, Elick, Ferron, Kirkham, Orr, Prentice, Stebbins

The Bachelor of Science degree with a major in biology requires 37 hours in biology. Required courses include Bio 110, Bio 120, Bio 202, Bio 211, Bio 303, and Bio 480.

Upper division students may follow interests but must take at least one course from each of the following areas. A (structure; B (function), C (identification).

Group A—Bio 331, Bio 413, Bio 424, Bio 462

Group B—Bio 402, 431

Group C—Bio 322, Bio 341, Bio 442



## COURSES OF INSTRUCTION

Additional requirements include 13 hours of chemistry through organic and Math 140.

The Bachelor of Science in Education degree with biology as a single teaching field (Plan B) requires 30 hours in biology plus 18 hours in supporting subjects of chemistry and mathematics. Required courses include Bio 110, Bio 120, Bio 211 and 12 upper division hours in biology. In addition, 13 hours of chemistry through organic and Math 140.

The Bachelor of Science in Education degree with biology as one of two teaching fields (Plan A) must complete 22 semester hours in biology, 12 of which must be upper division, plus 13 hours in supporting subjects of science and mathematics. Required courses are Bio 110, Bio 120, and Chem 100, three hours in mathematics (Math 130 or equivalent), and either Phys 151 or Geol 110. See page 97 for teacher education requirements.

### 0401-100—General Biology

5 hrs. cr.

A one semester general treatment of the unifying principles of living things including metabolism, genetics, evolution and ecology. Four lectures and one 2 hour lab per week. (Does not count toward any biology major.)

### 0402-110—General Botany

5 hrs. cr.

Fundamental principles of metabolism, growth and reproduction as expressed in the plant kingdom. A survey of the major groups of plants is included as an integral part of the study. Three lectures and two 2 hour labs per week.

### 0407-120—General Zoology

5 hrs. cr.

The morphology, physiology and classification of animals with emphasis on the anatomy and physiology of man. Three lectures and two 2 hour labs per week.

### 0402-201—Economic Botany

3 hrs. cr.

A comprehensive study of the economic uses of plants. The present and possible future value of lower plants is covered. Emphasis is placed upon the economic aspects of higher plants from an agricultural, horticultural and crop selection viewpoint as well as from a pharmacological textile usage, etc. view. Three lectures a week. Prerequisite: Bio 100 or 110.

### 0422-202—Genetics

3 hrs. cr.

A comprehensive introduction to the principles of heredity and variations as exemplified by both the higher plants and animals. emphasis will be placed on the cytological and molecular approach to gene action, linkage, crossing-over and various other genetic mechanisms such as sex-linkage and mutations. Three lectures a week. Prerequisite: Bio 100, 110, or 120.

### 0411-211—Microbiology

5 hrs. cr.

Principles of general microbiology with special emphasis on the anatomy, nutrition, physiology and chemistry of bacteria, fungi, and other



## BIOLOGY

microscopic organisms. Three lectures and two 2 hour labs per week. Prerequisites: Bio 100 or 110 and one year of inorganic chemistry, or permission of the instructor.

### **0412-221—Human Anatomy and Physiology** **5 hrs. cr.**

The structures and functions of the human body with emphasis on arrangement of organs and coordination of body systems. Three lectures and two 2 hour labs per week. Prerequisite: Bio 120.

### **0411-231—Fundamentals of Medical Microbiology** **5 hrs. cr.**

For students interested in paramedical professions. Topics of study include the general principles of microbiology, immunology, host-parasite relationships of pathological organisms. Three lectures and two 2 hour labs per week. Prerequisite: 1 course each of a college chemistry and a biological science. Credit toward the biology major may include either Bio 211 or Bio 231 but not both.

### **0401-302—History of Biology** **2 hrs. cr.**

A historical survey into the origin and development of the fundamental concepts of biology as well as contemporary developments in the field of biological research. Two lectures a week. Prerequisite: Junior standing or consent of the instructor.

### **0402-303—Principles of Taxonomy** **1 hr. cr**

A course designed to aid the biology student in the principles of zoological and botanical taxonomy, understanding the species concept and cognizance of taxonomic literature. Prerequisites: Bio 110 and 120 or permission of the instructor. One lecture per week. Fall semester.

### **0420-310—Field Biology** **2 hrs. cr.**

The course engenders appreciation and understanding of the local flora and fauna, and provides information pertinent to preparation and preservation of specimens for laboratory use. Consists of one lecture and one two-hour laboratory each week. At least one Saturday field trip will be required. Prerequisite: Bio 100 or permission of instructor. (Does not count toward any biology major.)

### **0420-312—Environmental Biology** **3 hrs. cr.**

A study of environmental factors and their interactions with living things. Emphasis is placed on human ecology and wise environmental utilization. Three lectures per week. Prerequisite: Physics 100, Biology 100, Math 110; or, permission of the instructor.

### **0420-314—Environmental Biology Laboratory** **2 hrs. cr.**

Practical experiences in measuring environmental factors and conducting ecological investigations. Four hours of laboratory per week. Co-requisite or Prerequisite: Biology 312 or permission of the instructor.

### **0402-322—Taxonomy of Flowering Plants** **4 hrs. cr.**

The relationships among selected plant groups, classification and



## **COURSES OF INSTRUCTION**

descriptions of taxa, nomenclature and concepts concerning the evolutionary sequence of various plant characters. Southwestern Missouri flora will be emphasized. Two lectures and two, 2 hour lab/week. Prerequisites: Bio 110 and 303.

### **0408-331—Comparative Chordate Anatomy 5 hrs. cr.**

Designed for the serious student of biology or those students planning to enter professional schools of medicine, dentistry or veterinary science. Acquaints the student with the evolutionary trends of chordate structure and development with special emphasis on the vertebrate organs and organ systems. Two lectures and two 3 hour labs/week. Prerequisite: Bio 120.

### **0421-332—Introduction to Entomology 3 hrs. cr.**

A study of the insects with respect to collecting methods, taxonomy, life history, morphology and evolution. Prerequisites: Bio 120 and 303. Two lectures and one 3-hour lab/week.

### **0408-341—Vertebrate Zoology 5 hrs. cr.**

Classification, morphology, physiology, development and evolution of vertebrate animals. Three lectures and two, 2 hour labs/week. Prerequisite: Bio 120.

### **0411-342—Microtechnique 2 hrs. cr.**

A study of the principles of preserving, fixing, staining, and mounting of biological materials. Prerequisites: Bio 110 and 120. Two 2-hour labs/week.

### **0420-402—General Ecology 4 hrs. cr.**

A study of plant and animal communities in relation to their environment, emphasizing the flora and fauna of Southwest Missouri. Soils, climate and other major environmental factors responsible for the distribution and association of plants and animals are also considered. Two lectures and one 3 hour lab/week. Prerequisite: Bio 110, 120, and 322, or consent of the instructor.

### **0406-413—Plant Anatomy 3 hrs. cr.**

A comparative study of the tissues and cellular structure in the higher plants as illustrated in roots, stems, and leaves with special emphasis upon the evolution and development of the structures. Two lectures and one 3 hour lab/week. Prerequisite: Biology 100 or 110 and 201.

### **0410-424—Plant Morphology 3 hrs. cr.**

A comparative study of the structures, life histories, and evolutionary tendencies concerning the vegetative and reproductive organs of the lower plants. Two lectures and one 3 hour lab/week. Prerequisite: Biology 100 or 110 and 201.

### **0410-431—Animal Physiology 5 hrs. cr.**

A comprehensive coverage of the chemical and physical phenomena occurring within living animals, with major emphasis placed on vertebrates.



## GENERAL BUSINESS

Three lectures and two 2 hour labs/week. Prerequisite: Organic Chemistry and 10 hours of biology. Bio 331, recommended.

### 0413-432—Histology 3 hrs. cr.

A detailed study of microscopic structure of animal tissues and organs with special emphasis on mammalian tissue. Prerequisite: Ten hours of zoology or consent of the instructor. Two lectures and one 3-hour lab/week.

### 0410-442—Invertebrate Zoology 5 hrs. cr.

Classification, morphology, physiology, development and evolution of the classes of invertebrate animals. Three lectures and two 2 hour labs/week. Prerequisite: Bio 120.

### 0410-462—Embryology 5 hrs. cr.

Includes detailed comparisons of developmental process of members of the classes of vertebrates. Three lectures and two 2 hour labs/week. Prerequisite: Bio 120 and/or Bio 331.

### 0499-490—Seminar 1 hr. cr.

A faculty supervised discussion group concerned with reviews and reports covering current topics in the various fields of biology. Faculty members, as well as students, will present reviews in their various areas of interest. One meeting/week. Prerequisites: Primarily for biology majors of junior standing or other interested students with at least 15 hours of biological science.

### 0499-498—Seminar in Biology 3 hrs. cr.

A seminar for upper division majors only. The class will meet regularly a minimum of 3 hours each week. The course is designed to give specialized instruction in some discipline of biology not normally covered in other courses. Prerequisite: junior standing, 20 hours in biology and a minimum GPA of 2.5 in biology. Permission of the instructor required.

### 0499-499—Problems in Biology 1-3 hrs. cr.

Consists of individual work under the supervision of a staff member, with the credit and hours to be arranged. Problems may be undertaken in any field of biology, with adequate preparation and the consent of the supervising instructor. Prerequisite: A minimum GPA of 3.0 in 20 hours of biology.

## GENERAL BUSINESS

### Division of Business Administration

Compton, Cowan, Finke, Goode, Leitle, Robinson

The student may consider three approaches to the Bachelor of Science in Business Administration degree. Required courses common to all approaches are: Acct 101, 102; Econ 201, 202, 300, 350; GB 101, 220, 301, 302,



## **COURSES OF INSTRUCTION**

321; MM300, 350, 352. The Accounting approach requires an additional 18 hours of accounting courses. The General Business approach requires an additional 12 hours of business courses with a minimum of 3 hours selected from each of the following areas: Economics and Finance, Marketing and Management, General Business. The Marketing and Management approach requires an additional 18 hours of business courses, 12 hours of which are selected from marketing and management courses.

A major for the Bachelor of Science in Education degree with Business Education as one of two teaching fields (Plan A) consists of 30 semester hours. The required courses are: OA, 101, 102, 111, 120, Acct 101, 102, and either Acct 211 or 212 or 401, Econ 201, 202, and 3 hours of upper division electives in Business. Other course work may be substituted for shorthand if the student does not plan to certify in it. Students having proficiency in typewriting and shorthand may ask to be tested. If advanced standing is granted in the subjects, the student will substitute other courses in order to meet the 30 hours requirement. See page 97 for teacher education requirements.

A major in the Bachelor of Science in Education degree with Business Education as a single teaching field (Plan B) consists of 42 semester hours. The required courses are: Acct 101, 102, and either Acct 211 or 212 or 401, Econ 201, 202, GB 121, 301, 302, MM 350 or 300, OA 101, 102, 111, 120, and 3 upper division elective hours in Business. Course substitution and advanced placement is the same as under Plan A in the paragraph above. See page 97 for teacher education requirements.

The requirements leading to Certificates of Achievement and Associate of Science degrees are found on page 156.

### **0501-101—Introduction to Business**

**3 hrs. cr.**

An introductory course in modern American business, including a study of the capitalistic system, ownership and organization, management problems, marketing, finance, law and taxation.

### **0501-110—Business Mathematics**

**3 hrs. cr.**

A review of the fundamental processes of mathematics as applied to business. It also includes common and decimal fractions, percentages, markup, interest, bank discount, compound interest, annuities, insurance, payrolls, taxes, and financial statements. It should be taken concurrently with or precede accounting and/or office machines.

### **0501-121—Office Machines**

**3 hrs. cr.**

A laboratory course in the operation of the office machines found in the modern business office. Training is given in the operation of the ten-key and full-key adding machines, the electronic calculator, the rotary calculator, the printing calculator, the key-driven calculator, the bookkeeping machine, the transcriber, and the spirit and stencil duplicators. Emphasis is placed upon the student developing accuracy and speed in working typical business problems. Meets five days a week. Prerequisite: 1 semester of high school or college typewriting.



## GENERAL BUSINESS

### 0501-122—Office Machines

3 hrs. cr.

An advance laboratory course, continuing the work as set up in office machines 121. Special emphasis is placed on machine bookkeeping and the electronic, rotary and printing calculators. The student is also expected to attain additional skill in the operation of adding machines. A special unit of the course includes operation of programmatic electronic equipment. Meets three days a week. Prerequisite: GB 121.

### 0501-220—Business Communications

3 hrs. cr.

The study of principles for writing effective business letters, memos, formal and informal reports and all phases of effective business communications. Prerequisites: Eng 101 and 102 or permission.

### 0501-301—Business Law

3 hrs. cr.

A study of the principles of law and its enforcement as applied to American Business. The course includes the study of contracts, agency and employment, negotiable instruments, personal property, bailments, and sales of goods. Special attention is placed on law terminology and cases and problems are used to illustrate the various aspects of business law.

### 0501-302—Business Law

3 hrs. cr.

Relates to partnerships, corporations, real property and leases, insurance security devices, bankruptcy, trusts and estates, and government regulations. Cases and problems are used extensively. Prerequisites: Junior standing or consent of the instructor. 301 should precede 302.

### 0501-321—Statistics

3 hrs. cr.

Introduction to the basic concepts of statistical inference and to the methods of statistical analysis. Prerequisite: Math 130 or equivalent.

### 0506-337—Managerial Data Processing

3 hrs. cr.

Study of the application of automatic information processing to business, the media for recording, processing, and controlling of business information by the automatic process, and the formats and flow of data through electronic computers with simulated problems applicable to areas of Accounting, Management, and Marketing. Prerequisite: Junior standing in Business Administration.

### 0502-491—Tax Accounting [See Accounting 401]

3 hrs. cr.

### 0599-498—Seminar in General Business

1-3 hrs. cr.

A seminar for upper division general business or related majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission.

### 0599-499—Independent Study in General Business

1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of general business for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission.



# CHEMISTRY

Division of Arts and Sciences

Department of Physical Science

Albright, Baiamonte, Kash, Whittle

A major for the Bachelor of Science degree consists of 34 semester hours in chemistry plus 20 additional hours in mathematics and physics. The required courses are: Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Chem 302, Chem 401, 4 elective upper division hours in chemistry, Math 150, Math 250, Phys 250, and Phys 260.

A major for the Bachelor of Arts Degree consists of 26 semester hours in chemistry plus 13 additional hours in mathematics and physics. The required courses are: Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Chem 302, Math 140 or Math 150, Phys 151, and Phys 152. An A.B. degree taken by students who desire some knowledge of chemistry as a basis for work in other fields, but who do not expect to become professional chemists.

A major for the Bachelor of Science in Education degree with one teaching field (Plan B) consists of 50 semester hours. The required courses are: Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Chem 302, Chem 401, Math 150, Math 250, Phys 250, and 5 elective hours in 200 level and above courses in mathematics, physics and/or Chemistry. See page 97 for teacher education requirements.

A major for the Bachelor of Science in Education degree with chemistry as one of two teaching fields (Plan A) consists of 26 semester hours plus 5 hours of mathematics. The required courses are: Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Chem 302, and Math 140. See page 97 for teacher education requirements.

## Physical Science Major

A major for the Bachelor of Science in Education degree with a double teaching field in physics and chemistry consists of 21 hours of chemistry and 20 hours of physics, 5 hours of Geology, plus mathematics through Math 260. The required courses are: Phys 250, Phys 260, Phys 301, Phys 381, Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Geol 110, plus 3 hours of upper division electives in physics. See page 97 for teacher education requirements.

### 1905-100—Introductory Chemistry

5 hrs. cr.

The basic principles and theories of general chemistry. Primarily designed as a terminal course in Chemistry. Three lectures, one 3-period laboratory, and one recitation session per week.

### 1905-101—General Chemistry I

5 hrs. cr.

Introduction to theories of chemistry with emphasis on the relationship of structure to properties of matter and the quantitative aspect of changes. Three lectures, one 3-period laboratory, and one recitation session per week. Prerequisite or corequisite: Math 140 or higher level math course.



## CHEMISTRY

### 1905-102—General Chemistry II

3 hrs. cr.

A continuation of Chem 101. Emphasis on the dynamics and thermodynamics of chemical processes and on the properties and reactions of analogous groups of cations and anions. Three lectures and one recitation session per week. Prerequisites: Chem 101 with a minimum grade of C or permission of instructor and Math 140 or higher level math course.

### 1905-162—Qualitative Analysis

3 hrs. cr.

Identification of cation and anions. Application of principles presented in Chem 102. One lecture and two 3-period laboratories per week. Prerequisite or corequisite: Chem 102.

### 1905-201—Quantitative Analysis

5 hrs. cr.

Includes volumetric, gravimetric, and some potentiometric and spectrophotometric analysis. Three lectures and two 3-period laboratories per week. Prerequisite: Chem 102.

### 1907-300—Organic and Biological Chemistry

5 hrs. cr.

Deals with the principles of organic chemistry—nomenclature, properties, stereochemistry, and reactions. Designed as an introductory course in organic chemistry slanted toward a basic understanding of the molecular basis of life. Three lectures, one 3-period laboratory, and one recitation session per week. Prerequisite: Chem 102.

Note: Not open to students having completed Chem 302.

### 1907-301—Organic Chemistry I

5 hrs. cr.

Deals with both aliphatic and aromatic compounds, their nomenclature, properties, reactions and stereochemistry. Three lectures, one 3-period laboratory, and one recitation section per week. Prerequisite: Chem 102.

### 1907-302—Organic Chemistry II

5 hrs. c.

A continuation of Chem 301. A mechanistic treatment of substitution, elimination, addition, and free radical reactions. Three lectures, one three-period laboratory, and one recitation session per week. Prerequisite: Chem 301.

### 1908-401—Physical Chemistry I

4 hrs. cr.

Gases, solids, liquids, homogeneous and heterogeneous solutions and thermodynamics. Theoretical derivations of equations and mathematical treatment of physical and chemical phenomena. Three lectures and one 3-period laboratory per week. Prerequisites: Math 250 and Phys 260.

### 1908-402—Physical Chemistry II

4 hrs. cr.

A continuation of Chem 401. The study of chemical kinetics, electromotive force, photochemistry, colloid chemistry, and atomic and molecular structure. Three lectures and one 3-period laboratory per week. Prerequisite: Chem 401.

## COURSES OF INSTRUCTION

### 1908-421—Instrumental Analysis

5 hrs. cr.

Special analytical technique using spectrophotometry, gaschromatography, colorimetry, and electrometric methods to include potentiometric, conductometric, polarographic, and electrogravimetric analysis. Three lectures and two 3-period laboratories per week. Prerequisite: Chem 201.

### 1906-422—Advanced Inorganic Chemistry

4 hrs. cr.

Modern inorganic chemistry with emphasis upon coordination complexes, periodic classification of the non-transitional and transitional elements. Three lectures and one 3-period laboratory per week. Prerequisites: Chem 102 and Math 250.

### 1907-472—Organic Qualitative Analysis

4 hrs. cr.

Systematic identification of organic compounds and mixtures. Two lectures and two 3-period laboratories per week. Prerequisite: Chem 302.

### 1999-498—Seminar

1-3 hrs. cr.

A seminar for upper division chemistry majors. The content of the course, depending on the students' needs, will vary from library research to special topics in chemistry. Prerequisite: senior standing or permission of the Department Head.

### 1999-499—Independent Study

1-3 hrs. cr.

Independent investigational techniques; includes a paper upon a selected topic with both a critical survey of the chemical literature and results from advanced laboratory experimentation. Open to students having (1) a minimum of 15 hours of chemistry, (2) the ability to undertake independent work, and (3) permission of the instructor.





# COMPUTER SCIENCE

## Division of Technology

Carpenter, Cragin

The rapid increase in the use of electronic equipment in business and industry has created the need for the Computer Science programs. Students successfully completing one of these programs will find many opportunities for employment in banking, industry, and various governmental agencies. There are three available programs;

The associate of Science degree in Computer Programming requires the completion of the General Education courses (see page 66), plus the following: Acct 101 and 102, Acct 211, Comp 100, Comp 110, Comp 120, Comp 130, Comp 140, Comp 150, Comp 200, Econ 201 and 202, GB 321, Math 140. This is a two-year program.

The Associate of Science degree in Electronic Data Processing Coordination prepares the graduate for immediate employment in tabulating departments in banks, industries, or governmental agencies. The student will become capable of simple program design and operation of tab equipment and will possess an extensive background in general secretarial work. The degree requires the completion of the General Education courses (see page ) plus the following: Acct 101 and 102, Comp 100, Comp 110, Comp 120, Comp 130, GB 101, GB 321, Math 130, and OA 201. Electives should be selected, with approval of adviser, from the business areas of statistics, economics, shorthand, secretarial procedures, business law or office machines. This is a two-year program.

The Associate of Science degree in Computing Analysis prepares the graduate for entry into fields of science and engineering as a computer programmer. In this field the programmer confers with engineers, scientists and other officials concerned, to determine if data meets the needs of the problems and, if necessary, develop mathematical formulas and procedures to provide more efficient machine operation. The degree requires the completion of the General Education courses (see page ) plus the following: Comp 120, Comp 130, Comp 140, Comp 150, Comp 220, Math 150, Math 250, Math 260, Math 322, Math 431, Math 361, Phys 250, and Phys 260. This is a two-year program.

### 5101-100—Basic Computing Machines

3 hrs. cr.

Illustrates the need for machines in accounting and record keeping, and demonstrates the concept, power, and flexibility of the unit record. Includes the unit records, machine functions, elements of a machine, card punch, verifier, interpreter, sorter, reproducing punch, collator, tabulators, and calculators and introduction to number systems. Basic problem analysis and logical block diagramming.

### 5102-110—Key-Punch Operation

3 hrs. cr.

Preliminary emphasis on basic mastery of the keyboard and mechanism of the key-punch. Latter portion of the course places emphasis on speed and accuracy of operation of both key-punch and E.A.M. equipment. Prerequisite: H. S. typewriting or OA 101. Daily.



## **COURSES OF INSTRUCTION**

### **5103-120—Introduction to Programming**

**3 hrs. cr.**

An introduction to digital computers which includes: Basic principles, systems theory, decimal systems, arithmetic operations, self-complementing codes and other coding systems, computer logic, systems components, general block diagram and program functions, high speed memory, programming essentials, and solution of simple data processing problems. Two one-hour lectures; one two-hour laboratory per week. Prerequisites: Comp 100 and Math 130 or consent of instructor.

### **5103-130—Advanced Programming**

**3 hrs. cr.**

The functions and capabilities of electronic data-processing machines, introducing student to some of the tools and raw material necessary for becoming a programmer. Includes computer applications, organization of the data processing system, instruction—card system; methods of program debugging, housekeeping techniques, loops and indexing, and subroutines. Two one-hour lectures; one two-hour laboratory per week. Prerequisite: Comp 120.

### **5103-140—Data Processing Applications**

**3 hrs. cr.**

A continuation of 130. The principles presented in previous courses will be employed repeatedly in this course. Includes subroutine, macro-programming, job timing, programming a random access device, and program testing. Latter portion of course involves individual projects in data processing from analysis through implementation. Two one-hour lectures; one three-hour laboratory per week. Prerequisite: Comp 130, or consent of instructor.

### **5103-150—Computer Machine and Machine Language**

**3 hrs. cr.**

Provides the necessary foundation for study of business data processing. Usually includes the concepts of notation, binary system, octal system, systems conversions, representation of a number with an arbitrary base, fixed and floating point numbers, precisions and significances, and linear equations. Prerequisite: Comp 100 or consent of instructor. Three one-hour lectures.

### **5103-200—Systems Development and Design**

**3 hrs. cr.**

Business systems design and development designed to guide the student through the evolution of a system, analysis of present information flow, system specifications and equipment selections, and implementation of the system. Includes the approach, requirements of a system, developing the solution, data controls, system controls, system evaluation, finalizing the system, and system implementation. Three one-hour lectures plus necessary arranged laboratory time. Prerequisite: Comp 140.

### **5104-220—Analog Computers**

**3 hrs. cr.**

Methods and techniques of solving simultaneous linear and non-linear differential equations on electronic analog computers. Includes the principles of multiplication and division and simulation of non-linear devices and systems. Two one-hour lectures; one two-hour laboratory per week.



## **DRAFTING AND DESIGN**

### **5104-250—Introduction to Numerical Analysis**

**4 hrs. cr.**

Digital computer programming, finite differences, numerical solution of non-linear systems, and differential equations. Problem solving on a digital computer. Must be preceded or taken simultaneously with Math 322. Three one-hour lectures; one two-hour laboratory per week.

## **DRAFTING AND DESIGN**

### **Division of Technology**

**Anderson, Coburn**

The Drafting and Design curriculum is planned to provide students with the knowledge and skills necessary to enable them to obtain employment as draftsmen in the engineering and design departments of industry, with governmental agencies, consulting engineering firms, and architectural firms.

The Associate of Science degree in Drafting and Design requires the completion of the General Education courses (see page 66) plus the following: Draf 110, Draf 120, Draf 130, Draf 200, Draf 210, Draf 220, and Draf 230. Electives should be selected with the assistance of the student's adviser from the areas of physical science, business, and psychology.

### **5304-110—Introductory Drafting**

**3 hrs. cr.**

An introduction to drafting, including the use of instruments, geometric construction, lettering, orthographic projection, dimensioning, sections and conventions, auxiliaries, pictorial drawing and print making. One hour lecture and four hours laboratory per week.

### **5304-120—Descriptive Geometry**

**3 hrs. cr.**

Practical applications of principles to problems of geology and mining, mechanical and architectural engineering. One hour lecture and four hours laboratory per week. Prerequisite: Draf 110.

### **5303-130—Machine Drafting**

**3 hrs. cr.**

Detail and assembly drawing of machines, threaded fasteners, and gears. Use of machine tools, processes and materials. One hour lecture and four hours laboratory per week. Prerequisite: Draf 110.

### **5303-200—Machine Design**

**3 hrs. cr.**

An introduction to machine design. Advanced drafting techniques and procedures. Elements of machine design, redesigning and original problems. One hour lecture and four hours laboratory per week. Prerequisites: Draf 120 and Draf 130.

### **5303-210—Production Illustration**

**3 hrs. cr.**

Pictorial drawing with emphasis on application to industrial production work. Methods of mechanical illustration, exploded views, design, layout techniques. One hour lecture and four hours laboratory per week. Prerequisite: Draf 120 and 130.

## **COURSES OF INSTRUCTION**

### **5304-220—Architectural Drafting**

**3 hrs. cr.**

An introduction to the fundamentals of architectural drafting. Instruction in the principles of design; building details and use of modern construction materials. One hour lecture and four hours laboratory per week. Prerequisite: Draf 110.

### **5303-230—Electrical and Pipe Drafting**

**3 hrs. cr.**

The use and application of electronic components and equipment. Techniques of representing these principles graphically. Problems dealing with design and layout of piping systems. Specifications of parts of piping systems, valves, fittings, and other components. One hour lecture and four hours laboratory per week. Prerequisite: Draf 110 and 120.

## **ECONOMICS AND FINANCE**

### **Division of Business Administration**

Gray, Larimore, Leitle, Leon, Stengle, Johnson

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree and a Bachelor of Science in Business education degree.

The requirements for the Technology Programs leading to Certificates of Achievement and Associate of Science degrees are found on page

### **0517-201—Principles of Economics [Macro]**

**3 hrs. cr.**

A study of aggregate economic performance with emphasis on national income stabilization and growth, business cycles, monetary and fiscal policy, international trade, comparative economic systems, and current economic problems. Prerequisite: Sophomore standing or permission.

### **0517-202—Principles of Economics [Micro]**

**3 hrs. cr.**

A study of fundamental institutions of the American Economy, the theory of price determination, and the theory of income distribution. Prerequisite: Sophomore standing or permission.

### **0517-300—Money and Banking**

**3 hrs. cr.**

The constituents, nature, functions, creation, and destruction of money and credit; the monetary institutions and their functions, with special emphasis on the commercial banking system and the Federal Reserve System; introduction to monetary theory and policy. Prerequisite: Econ 201 and 202.

### **0517-302—Economic Growth and Development**

**3 hrs. cr.**

Principles and problems involved in promoting development of the less mature economies, and growth in the more mature economies. Prerequisite: Econ 201 and 202.

### **0517-350—Corporate Finance**

**3 hrs. cr.**

An examination of the financial structure of business organization,



## EDUCATION

capital structure and methods of raising fixed and working capital; questions of financial policy, such as dividend policies and the conservation of surplus; comparative balance sheets and income-expense statements. Prerequisite: Econ 201 and 202, Acct 102.

### 0517-401—Microeconomic Analysis

3 hrs. cr.

An analytical study of the price systems, as affecting resource allocation and other welfare questions. Prerequisite: Econ 201 and 202.

### 0517-402—Macroeconomic Analysis

3 hrs. cr.

Study of the determination of the levels of real and monetary aggregate economic variables. Analysis of economic aspects of government regulation and direction of business enterprise. Prerequisite: Econ 201 and 202.

### 0517-411—Investments

3 hrs. cr.

Principles underlying investment analysis and policy; salient characteristics of governmental and corporate securities; policies of companies and investing institutions; relations of investment policy to money markets and business fluctuations; security price-making forces. Prerequisite: Econ 350.

### 0517-499—Seminar in Economics and Finance

1-3 hrs. cr.

A seminar for upper division majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission.

### 0517-499—Independent Study in Economics and Finance

1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of economics and finance for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission.

## EDUCATION

### Division of Education and Psychology

Easterday, Highland, Mason, Niess, Richardson, Sandrin

Schuster, Snyder, Starkey, Steere, Wiley

Realizing the important contributions made to our society by its educational system, Missouri Southern State College has made the preparation of teachers one of the basic objectives of the institution. The College faculty supports the objective by recognizing the preparation of teachers as the responsibility of the entire College. It is fulfilled through the Council on Teacher Education which coordinates the teacher education phase of the various instructional divisions. The Department of Education has the overall responsibility for the actual administration of the Teacher Education Program.

The Teacher Education Program is based on the following basic beliefs and assumptions:



## COURSES OF INSTRUCTION

1. A teacher should be provided a broad background in general education.
2. A teacher should be required to demonstrate an acceptable degree of mastery in his specialized teaching field.
3. A teacher should possess the personal qualities that can be identified as essential for effective teaching.
4. A teacher should demonstrate an understanding of the contribution education can make toward the continuation and improvement of our society.
5. A teacher should possess the professional attitudes and competences necessary to serve the education profession effectively.

As a reflection of these beliefs and assumptions, the College seeks to achieve these aims through the Teacher Education Program.

1. To provide the graduates of high schools in the College service area with information on teaching as a profession.
2. To identify and attract to the program of teacher education students who possess the intellectual, personal and physical qualities necessary to become effective teachers.
3. To provide a program of studies and experiences that will develop graduates capable of effectively performing their duties as teachers in the elementary or secondary school.
4. To provide prospective teachers with a program that emphasizes the importance of the basic theories of learning in teaching.
5. To cooperate with local, state, regional, and national agencies that have as their purpose the improvement of education.
6. To aid school administrators, boards of education, and other educational organizations with problems relating to education programs.

### Bachelor of Science in Education Degree

Students who are planning a career in teaching in the elementary and/or secondary school work toward the degree Bachelor of Science in Education. The satisfactory completion of the requirements for this degree qualifies a person for life certification in Missouri. Recipients of other degrees, who later decide to teach, can be certified through the State Department of Education by meeting the requirements outlined by the Director of Teacher Education.

Students deciding to work toward the degree Bachelor of Science in Education must elect to major in elementary education or in one of the subject matter areas available to those seeking a secondary certificate.

**Elementary Education**—If preparation for teaching at the elementary school level is desired, the student may emphasize either primary or intermediate grades. Elementary majors are required, also, to select an area of concentration of 21 semester hours from art, science (biological and physical), mathematics, social science, language arts (English and speech), music, health and physical education, and selected areas of special education. Applicable general education course requirements may



## EDUCATION

also count toward the selected area of concentration.

A student specializing in elementary education must complete these additional or specific general education courses:

1. One additional course in mathematics
2. Geography must be selected from Area 2, the Social and Behavioral Sciences
3. One additional course in U. S. History
4. A course in economics is strongly recommended

Candidates for the degree Bachelor of Science in education with a major in elementary education must satisfactorily complete 33 semester hours, including the following required courses: Bio 310, Eng 222, Music 262, Art 220, Eng 200 or Eng 301, Psy 302, HPER 311, Educ 492, Educ 311, Educ 312, Educ 340, Educ 370; select one of the following: Educ 351 or Educ 352 or Educ 420 or Educ 360 or Speech 492.

**Special Education**—An area of concentration is offered in three areas of special education. Each of these programs is designed to support a major in either elementary or secondary education, preferably elementary. Persons preparing to teach at the secondary level can also qualify for certification in any of the special education areas listed below. However, several basic elementary education courses will also need to be completed. Persons interested in such certification for teaching special education at the secondary level should check with the Department of Education for details and requirements.

### **The Educable Mentally Retarded Child**

To certify to teach the Educable Mentally Retarded Child, the following additional courses must be satisfactorily completed: Psy 200 or Psy 210, Psy 302, Educ 351, Educ 492, Speech 492, Psy 221 or Psy 432, Psy 412, Educ 420 or Psy 471, and two of the following: Soc 110, Psy 422, Educ 352, Educ 360, Psy 411, or HPER 340.

### **Learning Disabilities**

For certification to teach children with Learning Disabilities, the following additional courses must be satisfactorily completed: substitute Educ 352 for 351, Psy 411, and HPER 340.

### **Emotionally Disturbed Child**

For certification to teach the Emotionally Disturbed Child, the following additional courses must be satisfactorily completed: substitute Educ 361 for 351, Psy 411, HPER 340.

### **Remedial Reading**

A person who completes a baccalaureate degree with a teaching major may also be certified in the field of remedial reading by satisfactorily

## COURSES OF INSTRUCTION

completing the following courses: Educ 302, Educ 340 or Educ 422, Educ 492, Psy 412, Psy 471, Educ 471, Educ 472.

Three semester hours of the supervised teaching assignment must be completed in the area of special education in which the student decides to specialize.

**Secondary Education**—The student who desires to teach in a secondary school may choose to become qualified in a single teaching field with a high degree of specialization, or in two different teaching fields with a lesser degree of specialization in each. Available for secondary school teaching are:

- |                       |                       |
|-----------------------|-----------------------|
| 1. Art                | 8. Music              |
| 2. Biology            | 9. Physical Education |
| 3. Chemistry          | 10. Physics           |
| 4. Business Education | 11. Physical Science  |
| 5. English            | 12. Social Science    |
| 6. Spanish            | 13. Speech and Drama  |
| 7. Mathematics        |                       |

A student may elect a supporting area (a minor) from any one of the thirteen listed majors.

Under certain circumstances, it is possible for a person to become qualified to teach art, music, or physical education at both the elementary and secondary school level. Students interested in such a program should consult the department involved.

Students interested in certification to teach **driver education** or to **coach interscholastic sports** should consult the Physical Education Department.

A student emphasizing secondary education must also complete departmental course requirement under either Plan A or Plan B.

### **Plan A: [Double Major]**

This plan is intended for those persons who desire to qualify as teachers in two different subject matter areas. Each area requires 30 semester hours of specific course work which must meet minimum State Department of Education requirement. Plan A is not available in social science, music, or in programs preparing teachers for both elementary and secondary certification. **If Plan A is selected, the second teaching field is required.** Students may select an adviser in either department he chooses to major in or from the Department of Education.

### **Plan B: [Single Teaching Field, Comprehensive Major]**

This plan is intended for the person who wishes to concentrate his teacher preparation in one subject matter area only. 40 or more semester hours are required in the subject matter area or related supporting courses listed in this catalog by the department.

A person choosing a single teaching field may also earn a minor of 21 semester hours of specific course work in some other or related field, which



## EDUCATION

will qualify him for a second teaching field at the junior high school level only.

Each department that prepares students for secondary school teaching has developed a program of studies to be pursued by students who choose to follow either of the above plans. Plan B is mandatory for majors in social science, music, and in certain programs preparing students for dual certification at both the elementary and secondard school level.

### Advisement

Each student who enrolls at Missouri Southern will have an adviser assigned who will help the student plan his program of studies. All freshmen are advised by the Student Personnel Services. A student above the freshmen level will have faculty advisers assigned by the division in which he chooses to specialize. The Division of Education advises only majors in elementary education and physical education or those desiring to major in two different teaching fields at the secondary school level.

Information regarding teacher certification requirements, employment opportunities, professional education requirements, and supervised student teaching may be obtained from the Department of Education.

### ADMISSION TO THE TEACHER EDUCATION PROGRAM

Admission to Missouri Southern State College does not automatically confer admission to the Teacher Education Program.

Students who plan to enter the professional education sequence and become certified teachers are required to apply for admission to the Teacher Education Program. This application is made at the time the student is enrolled in Psychology of Human Development or during the first year of study at this college. The application form may be obtained from the Education Office. Each application is reviewed individually by the Teacher Selection Committee.

In determining a student's fitness for the teaching profession, the committee considers test results, scholarship, verbal proficiency, experience with children and youth, autobiography, physical and mental health, and appropriate faculty recommendations. The minimum scholarship essential to acceptance is a cumulative grade point average of 2.2 on 55 or more semester hours.

The Committee decisions on student applications fall into three categories: (1) Approved for admission to the teacher education program; (2) Approved on the condition that certain stated requirements be met; or (3) Advised not to continue in teacher education. The student must have acceptance into the program before he is admitted to the professional education sequence of courses.

### Supervised Teaching

A second crucial point of screening in the Teacher Education program occurs when the student is ready to do supervised teaching during the "Professional Semester" of the senior year. To qualify for supervised

## COURSES OF INSTRUCTION

teaching, the student must have a minimum 2.2 cumulative grade point average at the time of application and be recommended for student teaching by the major department unless approved by the Teacher Selection Committee. The National Teachers Examination is taken by all persons that enroll in supervised teaching.

### PROFESSIONAL EDUCATION

The following sequence of courses is to be completed by students planning to teach at the secondary or elementary level:

#### Freshman-Sophomore Year

Three or more hours of development psychology selected from Psy 110, Psychology of Human Development; Psy 200, Child Psychology or Psy 210, Adolescent Psychology. Persons who are planning to teach should choose Psy 110 in their first year of study. Educ 200, Exploratory Field Experience may be taken between semesters in the sophomore year by enrolling for it at the fall registration.

#### Junior Year

*Psy 310 Educational Psychology	3 hrs.
Educ 320 Structure of Teaching Elementary	2 hrs.
Educ 321 Video Teaching Laboratory, Elementary	1 hr.
Educ 330 Structure of Teaching, Secondary	2 hrs.
Educ 331 Video Teaching Laboratory, Secondary	1 hr.
*May be taken sophomore year	

#### Senior Year

The "Professional Semester" occupies one complete semester. For one-half of the professional semester, the student studies five courses and during the other one-half does supervised teaching (approximately eight weeks). **Courses outside of this block may not be scheduled.** Required courses are:

#### Secondary Teaching

- Educ 462 Student Teaching, Secondary
- Educ 432 Critical Issues in Education
- Educ 402 History and Philosophy of Education
- Educ 370 Intro to Instructional Media
- Educ A Course in Special Methods of Teaching in the Major Field

Select one of the following:

- Educ 412 Measurement and Evaluation
- Psy 451 Psychology of Learning
- Educ 412 Social Foundations of Curriculum

#### Elementary Teaching

- Educ 442 Student Teaching, Elementary
- Educ 432 Critical Issues in Education



## EDUCATION

Educ 402 Philosophy and History of Education  
Educ 322 Methods of Teaching Social Studies in Elem. School  
Educ 370 Introduction to Instructional Media  
Select one of the following:  
Psy 412 Measurement and Evaluation  
Educ 420 Introduction to Counseling  
Educ 412 Social Foundation of Curriculum Development

### Combination of Elementary and Secondary Teaching

For students majoring in art, music, foreign language or physical education who desire certification at both the elementary and secondary levels, the following professional semester is recommended:

Educ 464 Student Teaching, Combination  
Educ 432 Critical Issues in Education  
Educ Special Methods Course in Major Field  
Educ 370 Introduction to Instructional Media  
Select one of the following:  
Psy 412 Measurement and Evaluation  
Psy 451 Psychology of Learning  
Educ 412 Social Foundations of Curriculum Development

### TEACHER CERTIFICATION BY "ACADEMIC CONTRACT"

The Missouri State Department of Education has designed a procedure whereby college graduates who did not take a prescribed teacher education program in their degree programs can meet the necessary requirements to become a certified teacher by filing an "Academic Contract" with certain approved colleges and universities. The designated college is responsible for informing the State Department of Education what credit will be needed for certification and for the recommendation to issue the teaching certificate.

An "Academic Contract" may be executed with Missouri Southern State College on the condition that the person qualifies for admission into its teacher education program and has been properly enrolled in the college. All regular graduates of the teacher education program at Missouri Southern are awarded certification upon the recommendation of the Division of Education.

### EDUCATION COURSE OFFERINGS

0817-010—Techniques of Reading 2 hrs. cr.

A reading improvement program consisting of group and individual work, intended primarily for students needing remedial work in reading. Individual diagnostic reading tests determine student needs. (cannot be applied to any degree.)

0801-200—Exploratory Field Experiences 1 hr. cr.

Students are assigned to elementary or secondary school for fifty four clock hours to serve as educational aids. The course provides the opportunity for the student to explore teaching as a potential career based



## **COURSES OF INSTRUCTION**

on actual classroom experience. A student must have earned 34 hours of college credit to be eligible for this course. Assignments, normally, are made during the break during first and second semester. Prerequisite: Psych 110, or Psych 200, or 210.

**0833-312—Problems of Teaching Arithmetic in Elementary Schools [See Math 312] 2 hrs. cr.**

Basic course in the teaching of arithmetic in the elementary grades. The application of principles of learning and techniques of presentation are considered. Prerequisite: 3 hours math.

**0802-320—Structure of Teaching—Elementary 2 hrs. cr.**

An integrated course including problems relating to teaching in the elementary school. The acquisition of instructional skills and strategies and the demonstration of the ability to apply appropriate skills and strategies to the teacher-learner situation is expected. Classroom organization and management, instructional innovations and both verbal and non-verbal interaction skills are studied. Actual classroom participation in a public school is required. The course is team taught. Enrollment in a video-teaching lab (Educ 321) must be concurrent. Prerequisites: Psy 200 or 110, and Psy 310 and G.P.A. of not less than 2.2.

**0802-321—Video Teaching Laboratory 1 hr. cr.**

A required part of Educ 320 and must be taken concurrently with it. Short teaching episodes are prepared, taught and analyzed via video-tape. The basic concern is with the demonstration of effective teaching skills.

**0842-322—Teaching Social Studies in Elementary School 2 hrs. cr.**

Provides an introduction to the instructional materials and methods of teaching social studies in the Elementary School. This course is part of the Professional Semester.

**0803-330—Structure of Teaching—Secondary 2 hrs. cr.**

A study of the instructional skills, strategies and techniques of teaching in the secondary school. Development of the secondary school, classroom organization and management, instructional innovations, and both verbal and non-verbal interaction are studied. Actual participation in a public school classroom and field trips are required. The course is team taught. Enrollment in a video-teaching lab (Ed 331) must be concurrent. Prerequisites: Psy 200 or 210, or 110 and Psy 310 and a G.P.A. of not less than 2.2.

**0803-331—Video Teaching Laboratory 1 hr. cr.**

A required part of Educ 330 and must be taken concurrently with it. Short teaching episodes are prepared, taught, and analyzed via video-tape recordings. The basic concern is with demonstration of effective teaching skills.

**0843-332—Teaching English and Language Arts in Secondary School 2 hrs. cr.**

Provides an introduction to the instructional materials and methods of



## EDUCATION

teaching English, speech and foreign language in the secondary schools. This course is part of the Professional semester.

**0834-333—Teaching Science in Secondary School 2 hrs. cr.**

Provides an introduction to the instructional material and methods of teaching science in secondary school. The course is a part of the Professional Semester.

**0844-334—Teaching Social Science in Secondary School 2 hrs. cr.**

Provides an introduction to the instructional materials and methods of teaching social science in secondary school. The course is a part of the Professional Semester.

**0832-335—Teaching Music in Secondary School 2 hrs. cr.**

Provides an introduction to the instructional materials and methods of teaching music in secondary schools. The course is part of the Professional Semester.

**0838-336—Teaching Business in Secondary School 2 hrs. cr.**

Provides an introduction to the instructional materials and methods of teaching business in the secondary school. The course is part of the Professional Semester.

**0831-337—Teaching Art in Secondary School 2 hrs. cr.**

Provides an introduction to the instructional materials and methods of teaching art in the secondary schools. The course is a part of the Professional Semester.

**0835-338—Teaching Health and Physical Education in Secondary School 2 hrs. cr.**

Provides an introduction to the instructional materials and methods of teaching physical education and health in the secondary schools. The course is part of the Professional Semester.

**0833-339—Teaching Mathematics in Secondary School 2 hrs. cr.**

Provides an introduction to the instructional materials and methods of teaching mathematics in the secondary schools. The course is part of the Professional Semester.

**0802-340—Language Arts and Reading in the Elementary School 2 hrs. cr.**

Foundation course for development of understanding attitudes necessary to teach written and oral communication, listening and reading at the elementary level.

**0810-351—Teaching the Mentally Retarded 3 hrs. cr.**

Designed to help the prospective or in-service teacher understand mental retardation. Attention is given to causes, diagnosis, and teaching methods especially suited to mentally retarded children. Prerequisite: Psy 302.

## **COURSES OF INSTRUCTION**

**0810-352—Methods of Teaching Children with Learning Disabilities** 3 hrs. cr.

Prepares teachers in the area of learning disabilities with particular attention to verbal communication disorders and visual motor integration problems. Diagnosis methodology techniques and media will be stressed. Prerequisite: Psy 302.

**0816-360—Methods of Teaching the Emotionally Disturbed Child** 3 hrs. cr.

Established a teaching rationale utilizing a completely individualized program with a variety of teaching techniques which enable the emotionally disturbed learner to profit more fully from his school experiences. Prerequisite: Psy 302.

**0829-370—Introduction to Instructional Media** 2 hrs. cr.

Designed to give the teacher a basic understanding of the preparation and use of the various audio-visual materials and devices, with emphasis on the preparation of such materials. Enrollment is limited to education majors.

**0821-400—Philosophy and History of Education** 3 hrs. cr.

Study of educational thinking and practices from the ancient to the present. Emphasis is on relating earlier educational thought to building a personal philosophy of education. Prerequisite: Admission to Teacher Education. Offered to special students.

**0821-402—Philosophy and History of Education** 2 hrs. cr.

Study of educational thinking and practices from the ancient to the present. Emphasis is on relating earlier educational thought to building a personal philosophy of education. Prerequisite: Admission to Teacher Education. Offered in the Professional Semester.

**0829-412—Social Foundations of Curriculum Development** 2-3 hrs. cr.

Social Foundations of Curriculum and instruction as it relates to the elementary and secondary schools; consider the psychological, sociological, and philosophical basis for curriculum building. Emphasis is on social foundations. Prerequisite: Admission to Teacher Education.

**0827-420—Introduction to Counseling** 2-3 hrs. cr.

Survey of counseling philosophies, principles and practices. Designed for the classroom teacher as well as the guidance specialist, and is a basic course in the guidance sequence. Prerequisite: Psy 302.

**0830-422—Teaching Reading in Secondary Schools** 2 hrs. cr.

Designed to help prospective teachers understand reading development and its part in the total school program. Required for certification of secondary teachers of English in Missouri.



## EDUCATION

### 0827-432—Critical Issues in Education

2-3 hrs. cr.

Current problems in the area of education are explored, with special regard to legal and professional role of school personnel, their relationship to federal and state governments, and to local school districts; certification, salary schedules, retirement and other benefits, professional organizations for teachers, relationship with administration, pupils, parents, and the community. Prerequisite: Admission to Teacher Education. Offered in the Professional Semester.

### 0802-442—Student Teaching—Elementary

6 hrs. cr.

Participation, under supervision, in teaching on the elementary level in an off-campus school. Prerequisites: 88 semester hours with a grade point average of 2.2, admission to the program of teacher education, and Educ 320. Course assignments will include full-time supervised teaching and one-half of the semester. Students whose last names begin with the letters A-L should plan to enroll in first semester. M-Z in second semester. Additional general conferences are scheduled as needed. Specific assignment is made by the Department of Education.

### 0802-443—Student Teaching—Elementary

3 hrs. cr.

Participation, under supervision, on the elementary level in an off-campus school. Curriculum participation and observation consists of 15 hours per week for one half semester. Prerequisite: See Educ 442.

### 0802-444—Student Teaching—Special Education

3 hrs. cr.

Designed to be taken with elementary or secondary student teaching to provide an experience in teaching handicapped children. Prerequisite: See Educ 442. Course assignment to consist of a minimum of 15 hours a week of student teaching for one-half semester. Conferences will be scheduled as needed. Specific assignment is made by Department of Education.

### 0803-462—Student Teaching—Secondary

6 hrs. cr.

Participation, under supervision, in teaching on the secondary level in an off-campus school. Curriculum, materials and methods integrated with student teaching. Prerequisite: Educ 330 or equivalent, fifteen semester hours in teaching field, and a minimum of 88 semester hours with a grade point average of 2.2. Assignment to consist of full-time teaching for one-half semester with professional courses to be taken during the other half of semester. Students whose last names begin with the letters A-L should plan to enroll in first semester. M-Z in second semester. Additional conferences are scheduled as needed. Specific assignment is made by Department of Education.

### 0803-463—Student Teaching—Secondary

6 hrs. cr.

Participation, under supervision, in teaching on the secondary level in an off-campus school. Curriculum, materials, and methods integrated with student teaching. Prerequisites: See Educ 462. Assignment to consist of daily three-hour block of time during a regular semester.



## **COURSES OF INSTRUCTION**

### **0803-464—Student Teaching—Combination 3-6 hrs. cr.**

Participation, under supervision, in teaching on the secondary and elementary levels in an off-campus school. Intended for those students in specialized area such as Art, Music, and Physical Education who are preparing to be certified for teaching their speciality at both levels. Curriculum, materials and methods integrated with teaching participation and observation. Assignments consist of a minimum five hours per week of participation and conferences for each hour of credit for one-half the semester. Specific assignments are made by Department of Education.

### **0830-471—Practicum in Diagnosis of Reading Difficulties 3 hrs. cr.**

Practice of administering, interpreting, and reporting of diagnostic test results of reading difficulties. Prerequisites: A methods course in the teaching of reading (Education 340 or Education 422), A Methods course in the analysis and correction of reading problems (Education 492), and a course in individual intelligence tests (Psychology 471).

### **0830-472—Practicum in Remediation of Reading Difficulties 3 hrs. cr.**

Practice of using and reporting results of remedial methods in a case study of reading difficulties. Prerequisites: A Methods Course in Teaching (Education 340 or Education 422), A Methods Course in the Analysis of Correction of Reading Problems (Education 492), and a course in Individual Intelligence Tests (Psychology 471), and Education 471.

### **0899-498—Seminar in Problems of Education 1-3 hrs. cr.**

A seminar for upper division majors only. The seminar meets regularly each week. Meeting is equal to number of credit hours determined by the department for a given semester. The course is designed to cover specialized knowledge and/or current research in the discipline. Topics vary by semester and situation. Prerequisite: Advanced standing and consent of department head.

### **0899-499—Independent Study 1-3 hrs. cr.**

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field. Registration in the course must be approved by advisor and department head.

### **0830-492—Techniques of Diagnostic and Remedial Instruction in Reading 2 hrs. cr.**

A study of devices and techniques for diagnosis of reading disabilities and presentation of suggested remedial measures and methods of reducing deficiencies. Practical applications and laboratory experience will be emphasized. Special emphasis upon intermediate and secondary school reading problems. Prerequisite: Educ 340 or 422.



# ENGLISH

## Department of Language and Literature

Blevins, Couch, Dinges, Gardner, Greenlee, Harder  
Headlee, Lambert, Marquardt, McCormick, Mitchell, Morgan  
Preble, Short, Slanina, Walters, Wolfe

A major for the Bachelor of Arts degree consists of 42 semester hours (above freshman composition) and must include Eng 210, Eng 220, Eng 311, Eng 312, either Eng 301 or Eng 310, and either Eng 216 or Eng 315.

English may be used as a minor or supporting area with certain majors. A minor consists of 21 semester hours (above freshman composition) and shall include 12 upper division hours. The student shall select the courses in consultation with an English advisor.

A major for the Bachelor of Science in Education degree with one teaching field (Plan B) consists of 42 semester hours of English (above freshman composition) and Education 422. Required English courses are Eng 210, Eng 220, Eng 311, Eng 312, Eng 315, Eng 319, either Eng 301 or Eng 310, either Eng 331 or Eng 332; one course from Eng 431, Eng 411, Eng 452; one course from Eng 421, Eng 361, Eng 371; one course from Eng 322, Eng 342, Eng 381, Eng 481. See page 97 for teacher education requirements.

A major for the Bachelor of Science in Education degree as one of two teaching fields (Plan A) consists of 30 semester hours of English (above freshman composition) and Education 422. Required English courses are Eng 210, Eng 220, Eng 311, Eng 312, Eng 315; either Eng 301 or Eng 310; either Eng 331 or Eng 332.

English 101 is a prerequisite to all literature courses except Eng 120 and Eng 130. A lower division literature course is prerequisite to all upper division literature courses except Eng 311 and Eng 312.

### 1501-90—Composition

3 hrs. cr.

A course designed for students whose placement scored indicate a need for additional work. Three hours of class work and two hours of laboratory per week. No credit toward an associate degree or a baccalaureate degree. Course grade is recorded pass or fail.

### 1501-101—Composition

[per sem] 3 hrs. cr.

A study of the principles of effective writing based largely upon expository prose models. Students demonstrating exceptional ability may be permitted to substitute English 111.

### 1501-102—Composition

[per sem] 3 hrs. cr.

Develops reading comprehension through a study of various types of literature and offers practice in expository writing. Prerequisite: Eng. 101.

### 1501-111—Composition

3 hrs. cr.

A special composition and literature course for freshman demonstrating exceptional proficiency on placement tests. With a grade of C or better in English 111, a student automatically receives three hours credit for English

## **COURSES OF INSTRUCTION**

101, thereby satisfying the six-hour composition requirement. He enriches his 124-hour graduation program by enrolling for a course in another area in lieu of a second freshman composition course. Should he receive a D in English 111, however, he must take English 102.

**1503-120—Masterpieces of World Literature** [per sem] 3 hrs. cr.

Selected masterpieces of world literature through the Renaissance, except British literature.

**1503-130—Masterpieces of World Literature** [per sem] 3 hrs. cr.

Selected masterpieces of world literature from the Renaissance to the present except British literature.

**1502-210—English Literature** 3 hrs. cr.

Survey of English Literature to the Romantic Movement. Prerequisite: English 101.

**1507-216—Creative Writing** 3 hrs. cr.

Experimental writing in prose, poetry, and drama. A study of the writer's roles and technical approaches to literature in order to develop creative writing skills. Prerequisite: English 102.

**1502-220—English Literature** 3 hrs. cr.

Survey of English Literature from the Romantic Movement to the present. Prerequisite: English 101.

**1502-222—Children's Literature** 3 hrs. cr.

A reading, lecture and observation course for elementary education students, including evaluation of children's literature, its historical development, and its used in elementary school.

**1502-231—Literature for Adolescents** 3 hrs. cr.

An extensive reading course for secondary education students, including some evaluation of literature for adolescents and its presentation in the secondary school.

**1502-232—Black American Literature** 3 hrs. cr.

All representative literary genres illustrating the growth of Black American literature. Prerequisite: English 101.

**1501-301—Modern Grammar** 3 hrs. cr.

An investigation of current grammatical studies of modern English structure and usage, emphasizing transformational generative grammar.

**1502-310—History of the English Language** 3 hrs. cr.

An examination of the ancestors of English and the effect of other languages, peoples, and cultures upon its development. An investigation of the phonology, morphology, syntax and usage of the language throughout its history.



## ENGLISH

### 1502-311—American Literature

3 hrs. cr.

A survey of American literature to the Civil War.

### 1502-312—American Literature

3 hrs. cr.

A survey of American literature beginning with the Civil War.

### 1501-315—Exposition

3 hrs. cr.

A study of the techniques of factual writing and the writing of non-fiction. Recommended for all students especially those entering professional schools. Prerequisite: Six hours composition.

### 1501-319—Composition for Teachers

3 hrs. cr.

Designed to aid the prospective teacher of English in formulating principles of composition, in discovering techniques of application, and in correlating the principles of grammar with the teaching of composition in the secondary school.

### 1502-322—Twentieth Century Drama

3 hrs. cr.

Plays in English from Shaw to the present time, with selected readings in European playwrights.

### 1502-331—Shakespeare

3 hrs. cr.

A study of selected histories, early comedies, and sonnets. Prerequisite: Eng 210.

### 1502-332—Shakespeare

3 hrs. cr.

A study of selected tragedies and late comedies. Prerequisite: Eng. 210.

### 1502-342—American Novel

3 hrs. cr.

A study of representative American novels.

### 1502-361—The Romantic Period

3 hrs. cr.

Representative authors and literary tendencies. Prerequisite: Eng 220.

### 1502-371—The Victorian Period

3 hrs. cr.

Representative authors and literary tendencies. Prerequisite: Eng 220.

### 1502-381—The English Novel

3 hrs. cr.

Representative English Novels from 1700 to the present.

### 1502-411—Literature of the English Renaissance

3 hrs. cr.

Poetry and prose of the English Renaissance to 1603. Elizabethan and Jacobean drama, excluding Shakespeare. Prerequisite: Eng 210.

### 1502-421—Eighteenth Century English Literature

3 hrs. cr.

The enlightenment and the decline of neoclassicism in literature from 1700 to 1785, Pope to Johnson. Prerequisite: Eng 210.

## **COURSES OF INSTRUCTION**

- 1502-431—**Medieval English Literature** 3 hrs. cr.  
Literature of England in the Anglo-Saxon and Middle English period.  
Emphasis upon Chaucer. Prerequisite: Eng 210.
- 1502-432—**Milton** 3 hrs. cr.  
A study of the poetry and major prose. Prerequisite: Eng 210.
- 1502-452—**Seventeenth Century English Literature** 3 hrs. cr.  
Study of the art and thought in English Literature from 1603 to 1700.  
Prerequisite: Eng 210.
- 1502-481—**Twentieth Century Poetry** 3 hrs. cr.  
Representative Poetry from Yeats to the present.
- 1599-498—**Explorations in Literature** 3 hrs. cr.  
Seminar in literature for advanced majors. Topic open.
- 1599-499—**Independent Study** 1-3 hrs. cr.  
Individually directed study in selected areas for advanced majors.  
Prerequisite: a grade point average of 3.0 in English and permission.

## **FOREIGN LANGUAGES**

### **DIVISION OF ARTS AND SCIENCES**

#### **Division of Arts and Sciences**

#### **Department of Language and Literature**

Bodon, Colon, Studerus

The Department of Foreign Languages offers a full curriculum of courses in Spanish, with supporting courses in French and German. A language laboratory is used in all beginning courses.

A major for the Bachelor of Arts degree in Spanish consists of 40 semester hours and includes the same courses as for the Bachelor of Science in Education degree in the following paragraph.

A major for the Bachelor of Science in Education degree with Spanish as the single teaching field (Plan B) consists of 40 semester hours. The required courses are Span 101-102, Span 201, Span 202, Span 301, Span 302, Span 321, 322, Span 332, Span 421, Span 431, and Span 434.

A major for the Bachelor of Science in Education degree with Spanish as one of two teaching fields (Plan A) consists of 31 semester hours. The required courses are Span 101-102, Span 201, Span 202, Span 301, Span 302 and one course out of Span 321, 322 or 332.

A minor in Spanish consists of 21 semester hours (not adequate for a teaching certificate in the language unless one has a major in another language) and includes Spanish 101-102, Span 201, Span 202, one course of Span 301 or 302, and one course out of Span 321, 322 or 332.



## FOREIGN LANGUAGES

### FRENCH

**1102-101—Beginning French** 5 hrs. cr.  
Stresses conversation, pronunciation, essentials of grammar and diction. Language laboratory required.

**1102-102—Beginning French** 5 hrs. cr.  
Stresses spoken language, vocabulary building, pronunciation proficiency and grammar essentials. Language laboratory required.

**1102-201—Readings in French Literature** 3 hrs. cr.  
Intermediate reading. Discussion of literature in French. Emphasis on vocabulary building. Grammar review. Prerequisite: Fren 102 or equivalent.

**1102-202—Advanced Readings in French Literature** 3 hrs. cr.  
Representative works read and discussed in French. Short stories, a novel and poetry. Prerequisite: Fren 201 or equivalent.

**1102-301—French Composition** 3 hrs. cr.  
Practice in writing French accompanied by a thorough study of grammar and syntax. Prerequisite: Fren 202 or equivalent.

**1102-302—Advanced French Composition** 3 hrs. cr.  
Practice in writing French compositions. Thorough study of grammar, syntax, and idiomatic expressions. Prerequisite: Fren 301.

**1102-321—Survey of French Literature** 3 hrs. cr.  
Study of French Literature from its origins through the seventeenth century. Prerequisite: Fren 302 or equivalent.

**1102-322—Survey of French Literature** 3 hrs. cr.  
French Literature of the eighteenth, nineteenth and twentieth centuries. Prerequisite: Fren 321.

### GERMAN

**1103-101—Beginning German** 5 hrs. cr.  
Stresses conversation, pronunciation, essentials of grammar and diction. Language laboratory required.

**1103-102—Beginning German** 5 hrs. cr.  
Stresses spoken language, vocabulary building, pronunciation proficiency and grammar essentials. Language laboratory required.

**1103-201—Readings in German Literature** 3 hrs. cr.  
Intermediate reading. Discussion of literature in German. Emphasis on vocabulary building. Grammar review. Prerequisite: Ger 102 or equivalent.

**1103-202—Introduction to German Literature** 3 hrs. cr.  
Representative works are read and discussed in German with emphasis on conversation, syntax and literary significance. Prerequisite: Ger 201 or equivalent.

## COURSES OF INSTRUCTION

### SPANISH

- 1105-101—Beginning Spanish** 5 hrs. cr.  
Conversation and reading and writing. Pronunciation proficiency and grammar essentials. Conducted in Spanish as far as practicable. Language Laboratory required.
- 1105-102—Beginning Spanish** 5 hrs. cr.  
Continuation of 101.
- 1105-201—Intermediate Readings and Conversation** 3 hrs. cr.  
Reading and discussion of literature. Emphasis is on vocabulary building and grammar review.
- 1105-202—Introduction to Spanish Literature** 3 hrs. cr.  
Representative works are read and discussed in Spanish with emphasis on conversation, syntax, and literary significance. Prerequisite: Span 201.
- 1105-301—Spanish Composition** 3 hrs. cr.  
Practice in writing Spanish accompanied by a thorough study of grammar and syntax. Prerequisite: Span 202.
- 1105-302—Advanced Spanish Composition** 3 hrs. cr.  
Practice in writing Spanish accompanied by thorough study of grammar and syntax with emphasis on subtle elements of idiomatic usage. Prerequisite: Span 301.
- 1105-321—Survey of Spanish Literature** 3 hrs. cr.  
The literary background and important writers from the origin of Spanish literature to 1700. Representative works are read and discussed critically, with written and oral reports.
- 1105-322—Survey of Spanish Literature** 3 hrs. cr.  
1700 to the present. Prerequisite: Span 202.
- 1105-332—Introduction to Spanish-American Literature** 3 hrs. cr.  
Representative works of poetry, short story and essay are read and discussed. Prerequisite: Span 301, 302.
- 1105-421—Nineteenth Century Spanish Novel** 3 hrs. cr.  
The Spanish novel as an art form, exemplified by selected works by such writers as Alarcon, Valera, Pereda, Galdos, Pardo-Bazan, Palacio Valdes, and Blasco Ibanez. Prerequisite: Span 322.
- 1105-431—Don Quixote** 3 hrs. cr.  
The source, structure, characters, language and style of Cervantes' masterpiece. Prerequisite: Span 321.
- 1105-434—The Spanish American Novel** 3 hrs. cr.  
Origin and development of the Spanish American Novel, its political, social, geographical and literary influence. Prerequisite: 20 hours of Spanish.



## **GEOGRAPHY**

### **Division of Arts and Sciences**

Gockel, Smith

**2206-211—Regions and Nations**

**3 hrs. cr.**

A survey of the peoples of the earth and how their activities are influenced by climate, topography and natural resources.

**2206-222—Economic Geography**

**3 hrs. cr.**

A study of world commodities and the geographic factors which affect their production and make them significant to world economy.

**2206-311—Political Geography**

**3 hrs. cr.**

A study of the geographic factors which have influenced international relations and the policies of nations as political units. Geopolitics, religion, racial and ethnic groupings and other factors which contribute to unity or disunity will be emphasised.

**2206-412—Geography of Latin America**

**3 hrs. cr.**

A study of the physical regions and natural resources of South America, Latin America, Central America and the Caribbean Islands with special emphasis on current problems and relations with the United States.

## **GEOLOGY**

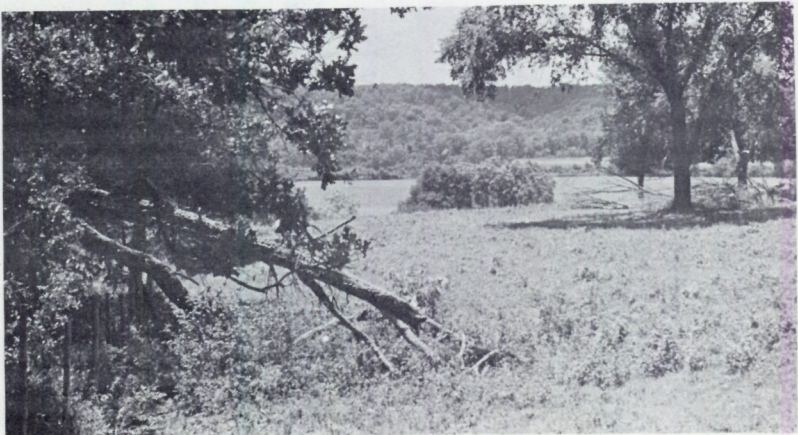
### **Division of Arts and Sciences**

Elick

**1914-110—Introduction to Geology**

**5 hrs. cr.**

The materials of the earth and those forces producing physiographic changes. Three lectures and two, 2-hour laboratory for field trips a week.



# HEALTH FACILITIES ADMINISTRATION

## Division of Technology

Courses in this field are designed to give individuals currently in management or supervisory positions in health care facilities, or those individuals planning to attain such positions, an insight into the applications of the principles of Administration and Management techniques to these institutions.

### **5218-200—Health Facilities Administration and Management      3 hrs. cr.**

The principles and practice of the administration of health facilities. Includes a study of the various types of facilities and their relation to each other and problems of administration and management unique to such facilities. Three one-hour lectures per week.

### **5218-210—The Administration and Management of the Long-Term Care Facility      3 hrs. cr.**

The problems unique to the long-term care facility including responsibilities for patient welfare, the relation to other health care facilities and to governmental agencies of various levels. Prerequisite HA 200 or consent of the instructor. Three one-hour lectures per week.







## HISTORY

Division of Arts and Sciences

Cooper, Holman, Hughes, Markman,

Renner, Schafer, Smith

Students who plan to do graduate study after completing the baccalaureate degree and/or who plan to enter government or community service will want to take the Bachelor Arts degree. A history major for this degree consists of 30 semester hours. The requirements are: Hist 110, Hist 120, Hist 200, Hist 201 or 202, 6 upper division semester hours in United States History, 6 upper division semester hours in European History and 6 upper division hours in history electives.

History may also be used as a minor or supporting area with certain

## **COURSES OF INSTRUCTION**

majors. The requirements are 21 semester hours: Hist 110, Hist 120, Hist 200, Hist 201 or 202 and 9 upper division hours in history.

A social science major for the Bachelor of Science in Education degree, with an emphasis in history, consists of 49 semester hours. (Plan B must be followed with this major, see Education, page 96). The requirements are: Hist 110, Hist 120, Hist 200, Hist 201 or 202, PSc120, 6 upper division hours in European History and 6 upper division semester hours in history electives. For the remaining 17 hours the candidate will choose Econ 201 and at least one course from each of the social science areas (i.e., political science, geography and sociology) beyond the general education courses. The student is encouraged to select courses in the other areas of social science in as much depth as possible within the 16 hours. See page 97 for teacher education requirements.

### **2205-110—United States History 1492-1877**

**3 hrs. cr.**

A survey study of the United States from the "Age of Discovery and Exploration" through reconstruction.

### **2205-120—United States History 1877 to the Present**

**3 hrs. cr.**

A continuation of course 110. This course surveys the economic, social and political development of the United States from 1877 to the present.

### **2205-200—Western Civilization to 1500**

**3 hrs. cr.**

A survey of the development and progress of western civilization from prehistoric times through 1500. The course surveys from the contributions of the early peoples to civilization as well as feudalism, the Church, the crusades and the Renaissance.

### **2205-201—Europe 1500 to 1815**

**3 hrs. cr.**

A survey study of Europe from the Renaissance and the Reformation to Waterloo. Emphasis is placed on the origin and development of the modern states system after 1500 as well as the social and cultural developments of the era.

### **2205-202—Europe 1815 to the Present**

**3 hrs. cr.**

A survey study of Europe in the 19th and 20th centuries. Emphasis is placed on political, social and economic developments accelerating the growth of liberalism, nationalism and imperialism.

### **2205-301—United States Social and Intellectual History**

**3 hrs. cr.**

A study of ideas that have influenced the intellectual, cultural and social aspects of United States History from colonial times to 1877. Prerequisite: Hist 110.

### **2205-302—United States Social and Intellectual History**

**3 hrs. cr.**

A continuation of History 301. A study of the society and ideas of the United States during the period of its great industrial expansion and emergence as a major world power. Prerequisite: Hist 110 or 120.



## HISTORY

### 2205-321—Ancient History

3 hrs. cr.

A study of ancient times from the prehistoric period to the end of the Roman Empire. Special consideration is given to the Ancient Empires and their contributions to literature, art, religion and science against a political, economic and social background. Prerequisite: Hist 200, 201 or 202.

### 2205-322—Medieval History

3 hrs. cr.

A study of Europe from the end of the Roman Empire to 1500. Emphasis is placed on the significant historical aspects of the medieval period such as feudalism, the Church, the Crusades and the Renaissance. Prerequisite: Hist 200, 201 or 202.

### 2205-331—Economic History of the United States

3 hrs. cr.

A study of the development of the American economy and its related institutions from colonial times to the present. Prerequisite: Hist 110 or 120.

### 2205-341—The American Frontier

3 hrs. cr.

The westward expansion of the United States and its effects upon the social, political and economic institutions until the close of the frontier in 1890. Prerequisite: Hist 110 or 120.

### 2205-352—Europe Since 1919

3 hrs. cr.

The aftermath of World Wars I and II in Europe. Emphasis is placed on the formation of the League, collective security, a study of the totalitarian systems, the United Nations and current problems of world peace. Prerequisite: Hist 200.

### 2205-361—The English Colonies in America

3 hrs. cr.

A study of the progress and development of the English Colonies from 1492 to 1776. Emphasis is placed on the extension of English social, political and economic institutions as a background for the American Revolution. Prerequisite: Hist 110.

### 2205-371—English History to 1660

3 hrs. cr.

A survey of the rise and development of the English people from the Roman conquest to the Stuart Restoration. Emphasis is placed upon English Constitutional development and related institutions. Prerequisite: Hist 200.

### 2205-372—English History from 1660

3 hrs. cr.

A continuation of History 371. This is a survey of English History from the Restoration to the present. Attention is placed on the development of the cabinet system and the emergence of modern political democracy. Prerequisite: Hist 200.

### 2205-381—Diplomatic History of the United States to 1900

3 hrs. cr.

A study of the diplomatic relations of the United States and the related development of its foreign policy from 1775 to 1900. Prerequisite: Hist 110 or 120.

## **COURSES OF INSTRUCTION**

### **2205-382—Twentieth Century Diplomacy**

**3 hrs. cr.**

A historical investigation of United States diplomacy and the world of our time. The course emphasises the increasing importance of the United States in World Affairs since it became a world power. Prerequisite: Hist 110 or 120.

### **2205;401, 402—Independent Study**

**1-3 hrs. cr.**

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field with a grade point average of 3.0. Registration in the course must be approved by adviser and department head.

### **2205-411—European Intellectual History**

**3 hrs. cr.**

A study of the intellectual, cultural and social occurrences in Europe from the Italian Renaissance to the French Revolution. Emphasis is placed on the Age of Enlightenment. Prerequisite: Hist 200, 201 or 202.

### **2205-412—European Intellectual History**

**3 hrs. cr.**

A continuation of History 411. Attention is given to the significant effects of the French Revolution, Nationalism, Socialism and mass warfare upon European civilization in the 19th and 20th centuries. Prerequisite: Hist 200, 201 or 202.

### **2205-431—The Renaissance and the Reformation 1300-1650**

**3 hrs. cr.**

A study of the political, economic, religious and social development of Europe from the Crusades through the Reformation. The course reviews early European society and institutions and traces the replacements of these by the modern state system and capitalism and the reformation of the Church. Prerequisite: Hist 200, 201 or 202.

### **2205-451—The United States 1870-1920**

**3 hrs. cr.**

A study of the United States at the turn of the century. The impact of the industrial revolution and its effect on social, political and economic institutions, the Progressive Movement and World War I. Prerequisite: Hist 110 or 120.

### **2205-452—The United States Since 1920**

**3 hrs. cr.**

A study of the impact of politics, diplomacy and industrial development of the United States during the five decades since 1920. Prerequisite: Hist 110 or 120.

### **2205-461—English Constitutional History**

**3 hrs. cr.**

The development of English political and legal institutions with emphasis on the Anglo-Norman background, the rise of parliament, Tudor absolutism, the Stuart period of revolution, development of the Cabinet, nineteenth century democratization, and evaluations resulting from the crises of the twentieth century.



## **JOURNALISM**

**2205-462—United States Constitutional History** 3 hrs. cr.

A study of the growth and development of the United States Constitution from 1787 to the present. Prerequisite: Hist 110 or 120.

**2205-481—History of China** 3 hrs. cr.

A survey of modern China. Special emphasis is placed on Chinese society, political developments and relations with the west in the 19th and 20th centuries. Prerequisites: Hist 200, 201 or 202.

**2205-482—History of Japan** 3 hrs. cr.

A survey of modern Japan. The course traces Japan's history from the middle of the 19th century to the present. Special attention is given to the development of Japan and the world reaction as to it as it came into contact with western culture. Prerequisite: Hist 200, 201 or 202.

**2205-491—The Era of the French Revolution  
and Napoleon** 3 hrs. cr.

A study of Europe during the period of revolution and reaction 1789-1815. Emphasis is placed on the French Revolution, the rise and fall of Napoleon and their manifestations for the future. Prerequisite: Hist 200, 201 or 202.

## **JOURNALISM**

**Division of Arts and Sciences**

**Department of Language and Literature**

**Massa**

The journalism program provides training for the student desiring to work in the communications media, for the education major who will advise newspaper and yearbook staffs, and for the student who plans to transfer to a school of journalism. While pursuing a bachelor's degree at Missouri Southern, a student may accumulate 25 hours in journalism. The education major can qualify for state certification. The student headed for a journalism school can test his interest in a career in this field by enrolling in a course or two and by working on the college newspaper, **The Chart**.

To receive the Bachelor of Arts degree with a major in English and a minor in journalism, the student must complete the English major requirements and 21 hours in the supportive area of journalism, as approved by the Division Chairman.

To receive the Bachelor of Science in Education degree with a major in English and certification in journalism, the student must complete the requirements for a major in English and accumulate 15 hours in the supportive area of journalism, as approved by the Division Chairman.

Students expecting admission to a school of journalism their junior year should follow the schedule recommended for the freshman and sophomore years of candidates for a Bachelor of Science in Education degree with a major in English. They must have 13 hours in one foreign language and principles of economics.

## **COURSES OF INSTRUCTION**

### **0602-111—News Writing**

**3 hrs. cr.**

A study of news of some complexity; editing, copy reading and proofreading. Practical work on the college newspaper, *The Chart*. Prerequisite: Consent of instructor.

### **0602-121—Mass Communications**

**2 hrs. cr.**

A study of the history and development of the mass communications industry and its role in the political, social and economic life of the present. Brief study of the professional requirements and vocational opportunities in the field of journalism.

### **0602-220—Practical Journalism**

**[per sem.] 1 hr. cr.**

Application of journalistic principles to the college newspaper. One hour of credit each term for a maximum of three terms. Prerequisite: Jour 111 or consent of instructor.

### **0602-231—Feature Writing**

**3 hrs. cr.**

Advanced courses in writing special articles for newspapers and magazines. Practical work on college publications. Prerequisite: Jour 111 or consent of instructor.

### **0602-232—Editing and Editorial Writing**

**3 hrs. cr.**

Principles of copy reading and editing. An analysis of editorials appearing in responsible publications and the writing of editorials of some maturity.

### **0603-241—Radio and Television News Writing**

**3 hrs. cr.**

Techniques of preparing radio and television newscasts, including reporting, writing, editing, and illustrating newscasts. Prerequisite: Jour 111, Speech 102.

### **0602-302—Photo-Journalism**

**3 hrs. cr.**

Theory and practice of photo-journalism. Study of technical and communications aspects of photography and their application to news media. Prerequisite: Jour 111.

### **0602-312—Publication Principles**

**2 hrs. cr.**

Editorial and production practices of trade journals and publications of church, school and business. Special emphasis on high school newspapers and yearbooks.

### **0602-320—Advertising**

**3 hrs. cr.**

(See Business, Mktg 401)

## **LAW ENFORCEMENT**

### **Division of Technology**

Dix, Seneker

The Associate of Science degree in Law Enforcement prepares students for entrance into police work, a field which has become highly specialized and complex at the local, state and national levels. Modern law



## **LAW ENFORCEMENT**

enforcement responsibilities make academic preparation beyond the high school level essential.

Many law enforcement agencies have specific requirements regarding minimum age, height, weight, vision and other related requisites. Students interested in this field should check with appropriate agencies regarding their requirements.

The Associate of Science in Law Enforcement degree requires the completion of the general education courses (see page 66) plus the following: PSc 120, Soc 110, Soc 212, Soc 322, Soc 412, Psy 221, Hper 212, L E 100, L E 110, L E 150, L E 190, L E 280, L E 210, L E 250, L E 290. Electives should be selected, with advisor approval, from the fields of literature or science.

### **5505-100—Introduction to Law Enforcement 3 hrs. cr.**

Municipal, county, state and federal police organizations. History and administration of justice. Responsibilities and opportunities in the field of law enforcement.

### **5505-110—Police Organization and Administration 2 hrs. cr.**

Management operations, communications, budgeting, recruiting, training and public relations as they pertain to the local and state law enforcement agencies.

### **5505-150—Interview and Report Writing 2 hrs. cr.**

The techniques of interviewing and writing the report. The collection, recording and preservation of evidence. How to preserve continuity in report writing. Law enforcement forms.

### **5505-190—Supervised Police Work 6 hrs. cr.**

The student spends a specific amount of time in the local police department, the local sheriff's department, and with the highway patrol learning the standard line activities. The purpose is to introduce the student to the actual duties of law enforcement officers.

### **5505-200—Criminal Investigations 3 hrs. cr.**

Fundamentals of criminal investigations including theory and history. Techniques appropriate to the specific type of crime are emphasized.

### **5505-210—Criminal Procedures 3 hrs. cr.**

Types of criminal evidence for police; criminal procedures in various courts; arrest, search, seizure, collections of evidence, and related topics.

### **5505-250—Criminal Law 3 hrs. cr.**

Criminal law purposes and functions; laws concerning arrest, search, and seizure. Rights and duties of officers and citizens in relation to local, state and federal laws. The development, application and enforcement of laws.

### **5505-290—Police Supervision and Management 3 hrs. cr.**

Principles of personnel management as applied to law enforcement agencies; evaluation, promotion, discipline, training, employer welfare, and problem-solving leadership.

# MACHINE TECHNOLOGY

## Division of Technology

Scott

Missouri Southern State College offers an Associate of Science Degree in Machine Technology. The specialized course work in this curriculum is designed to prepare students for employment in the metal working industries. General education courses provide growth as an individual and for constructive living in the family and nation.

The curriculum is college oriented. Students following this curriculum are regular members of the college student body and are expected and encouraged to participate in extracurricular activities.

The Associate of Science in Machine Technology requires the completion of the general education courses (see page 66) plus the following: Draf 101, Draf 130, Mach 100, Mach 110, Mach 150, Mach 160, Mach 210, Mach 220, Mach 230, Mach 250, Mach 260.

### 5315-100—Introduction to Machine Tool Processes

5 hrs. cr.

An introductory course covering the operation, safety, set-up and theory of the six basic machine tools--the lathe, drill press, milling machine, grinders, shaper and power saws--and the basic theory and operation of heat treatment and inspection equipment. Two one-hour lectures; three three-hour laboratories per week.

### 5315-110—Advanced Machine Tool Processes

5 hrs. cr.

The study and use of attachments and accessories for basic machine tools and the introduction of production machines: screw machines, turret lathe, tracer lathes, gear hob, electrical discharge machines, and chemical milling. Two one-hour lectures; three three-hour laboratories per week. Prerequisite: Mach 100.

### 5315-150—Technical Mathematics

3 hrs. cr.

The introduction and application of the basic concepts of math, geometry and trigonometry to machine tool processes.

### 5315-160—Process Instrumentation

3 hrs. cr.

Teaches quality control, inspection and precision measurement procedures. Utilizes air and electronic gauging systems, optical measurement and related math. One one-hour lecture; two two-hour laboratories per week.

### 5315-210—Fundamentals of Cutting Tools

5 hrs. cr.

Introduction to tool geometry, chip formation and effects of coolants and tool design on tool life. Instruction on the sharpening of standard cutting tools for drilling and on the applications of various factors on machinability. The use of carbides and ceramics as cutting tools. Two one-hour lectures; three two-hour laboratories per week. Prerequisite: Mach 110.



## **MARKETING & MANAGEMENT**

### **5315-220—Tool and Die Production 3 hrs. cr.**

Advanced course on the designing, machining and manufacturing of production tools and dies. One one-hour lecture; two two-hour laboratories per week. Prerequisites: Mach 110, Mach 150, and Draf 110.

### **5315-230—Jig and Fixture Production 3 hrs. cr.**

Advanced course on the designing, machining and manufacturing of production jigs and fixtures. One one-hour lecture; two two-hour laboratories per week. Prerequisites: Mach 110 and Draf 110.

### **5315-250—Numerical Control in Machining 3 hrs. cr.**

The introduction to point-to-point and continuous path numerical control, part programming, operation of numerical control systems, and justification and maintenance of numerical control systems. One one-hour lecture; two two-hour laboratories per week. Prerequisites: Mach 110, Mach 150, and Draf 110.

### **5315-260—Fundamentals of Metallurgy 3 hrs. cr.**

Introduction to ferrous and non-ferrous metallurgy. Studies the physical properties of the various alloys, heat treatment of them, chemical properties of metals, applications of the various metals, machinability, tensile strength and hardness testing, and study of the grain structure of the various alloys. Two one-hour lectures; one two-hour laboratory per week.

## **MARKETING AND MANAGEMENT**

### **Division of Business Administration**

Finke, Gray, Larimore, Leon, Miller

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree with the Marketing and Management approach. In the same place find the requirements for the Bachelor of Science in Education degree with a Business Education major.

The requirements for the Technology Programs leading to Certificates of Achievement and Associate of Science degrees are found on page 162.

### **0509-300—Principles of Marketing 3 hrs. cr.**

A survey of the major marketing methods, institutions and practices. The subjects of retailing, wholesaling, distribution channels, marketing legislation, advertising, cooperative marketing, pricing, marketing research and marketing cost are treated from the standpoint of consumers, middlemen and manufacturers. Prerequisite: Econ 201 and 202.

### **0509-312—Retailing 3 hrs. cr.**

Principles of successful retail management; analytical and research methods applicable to problems of retail management. Prerequisite: MM 300.

## **COURSES OF INSTRUCTION**

### **0509-350—Business Organization and Management 3 hrs. cr.**

A course in business organization and management with application of concepts and techniques to specific, realistic case situations. Prerequisite: GB 101.

### **0509-352—Personnel Management 3 hrs. cr.**

A study of the principles and practices of management with emphasis on the human factors, including procurement, development and maintenance of an effective work force. Prerequisite: MM 350 or consent of instructor.

### **0509-401—Advertising 3 hrs. cr.**

Description of fundamental advertising principles and their application in mass marketing. Analysis of advertising media, the preparation of advertising, and formulation of campaigns. Prerequisite: MM 300.

### **0509-412—Marketing Management 3 hrs. cr.**

Managerial aspects of marketing; problems involved in investigations of markets, planning the sales effort, management of sales and service personnel, and control of sales operations. Prerequisite: MM 350 and MM 300.

### **0509-431—Production Management 3 hrs. cr.**

Principles and decision analysis related to the effective utilization of the factors of production in manufacturing activities for both intermittent and continuous systems. The study of production organizations, analytical models and methods, facilities design, and the design of control systems for production operations. Prerequisite: MM 350.

### **0509-452—Business Policy 3 hrs. cr.**

An integrating course cutting across all fields of business administration. Cases pertaining to top management decision making are used. Prerequisite: MM 350.

### **0509-470—Marketing Research 3 hrs. cr.**

A course involving the systematic gathering, recording and analyzing of data relating to (1) market analysis, (2) sales analysis, (3) consumer research, and (4) advertising research. Prerequisite: GB 321 and 6 hrs. of Marketing.

### **0509-498—Seminar in Marketing and Management 1-3 hrs. cr.**

A seminar for upper division marketing and management or related majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission.

### **0509-499—Independent Study in Marketing and Management 1-3 hrs. cr.**

Individually directed readings, research, and discussions in selected areas of marketing and management for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: GPA of 3.0 in major field and permission.



# MATHEMATICS

## Division of Arts and Sciences

Allen, Boehning, Jensen, Jolly, Livingston,  
McCormick, Martin, Roubidoux, Subramanian

A major for the Bachelor of Science degree consists of 39 semester hours. The required courses are: Math 150, Math 250, Math 260, Math 300, plus 21 upper division hours in mathematics. In addition, 18 hours in physical sciences (excluding Chem 100 and Phys 100) are required.

A major for the Bachelor of Science in Education with mathematics as one teaching field (Plan B) consists of a total of 33 semester hours in mathematics. The required courses are: Math 150, Math 250, Math 260, Math 300, and 15 upper division hours in mathematics. In addition, 10 hours in the physical sciences are required.

A major for the Bachelor of Science in Education degree with mathematics as one of two teaching fields (Plan A) consists of 30 semester hours. The required courses are: Math 150, Math 250, Math 260, Math 300, and 12 upper division hours in mathematics. See page 97 for teacher education requirements.

### 1701-20—Beginning Algebra

2 hrs. cr.

A beginning algebra course with a review of basic arithmetic and practical applications.

### 1701-30—Intermediate Algebra

3 hrs. cr.

A course in intermediate algebra for students deficient in algebra. NOTE: No credit in Math 20 or Math 30 will count towards the requirements for a baccalaureate degree.

### 1701-110—Introduction to College Mathematics I

3 hrs. cr.

Basic college mathematics with an introduction to sets and the logic of algebra. This course satisfies the requirement in mathematics for general education. Prerequisite: One year of high school algebra and satisfactory score on the Mathematics Placement Test, or Math 20 with a grade of C.

### 1701-112—Trigonometry

2 hrs. cr.

Study of trigonometric functions. Prerequisite: One and one half units of high school algebra, one unit high school geometry or permission of the instructor and satisfactory score on the Mathematics Placement Test.

### 1701-120—Introduction to College Mathematics II

3 hrs. cr.

A continuation of Math 110. Sets of points, systems of numeration, metric geometry, modular systems, relations and functions, probability. Recommended for prospective elementary teachers. Prerequisite: Math 110.

### 1701-130—College Algebra

3 hrs. cr.

A course for students not majoring in the fields of math, science or engineering. Prerequisite: One and one half units of high school algebra,

## **COURSES OF INSTRUCTION**

one unit of high school geometry or permission of the instructor and satisfactory score on the Mathematics Placement Test.

### **1701-140—Algebra and Trigonometry** 5 hrs. cr.

This course is the equivalent of Math 112 and Math 130. Prerequisite: One and one half units of high school algebra, one unit of high school geometry or permission of the instructor and satisfactory score on the Mathematics Placement Test.

### **1701-150—Calculus with Analytic Geometry I** 5 hrs. cr.

Differentiation and integration of algebraic and trigonometric functions, and plane analytic geometry using vectors. Prerequisite: Math 140 with a grade of C, or four units of high school mathematics and a satisfactory score on the Mathematics Placement Test.

### **1701-250—Calculus with Analytic Geometry II** 5 hrs. cr.

Differentiation and integration of transcendental functions, polar coordinates, theory of limits, parametric equations. Applications to physical problems. Prerequisite: Math 150 with a grade of C.

### **1701-260—Calculus with Analytic Geometry III** 5 hrs. cr.

Solid analytic geometry, infinite series, partial differentiation and multiple integrals. Prerequisite: Math 250 with a grade of C.

### **1701-271—Selected Topics in Mathematics** 2 hrs. cr.

A course to enrich the student's knowledge and promote his interest in various areas of mathematics, especially in the area of modern mathematics. Recommended for all Math majors. Prerequisite: Math 150.

### **1701-300—Fundamentals of Mathematical Thought** 3 hrs. cr.

An introduction to modern algebra and analysis. Sets, relations, functions, logical development of number systems, introduction to theory of groups, rings, integral domains and fields. Prerequisite or corequisite: Math 260.

### **0833-312—Problems of Teaching Arithmetic in the Elementary Schools** 2 hrs. cr.

(See Education 312 for description.) Will not count toward a major in mathematics.

### **1701-322—Differential Equations** 3 hrs. cr.

Standard types of ordinary differential equations of the first and second order, linear equations with constant coefficients and applications to geometry and physical science. Prerequisite: Math 260.

### **1701-332—Geometry** 3 hrs. cr.

Concentrated Euclidian geometry theory from a modern axiomatic viewpoint. Includes an introduction to projective and differential geometry. Recommended for prospective secondary mathematics teachers. Prerequisite: Math 250.



## MATHEMATICS

### 1701-342—Abstract Algebra

3 hrs. cr.

Number theory, equivalence and congruence, theory of groups, rings, ideals, integral domains, and fields. Prerequisite: Math 300.

### 1703-350—Introduction to Numerical Analysis

4 hrs. cr.

(See Computer Science 250 for description.) One additional project is required for the mathematics credit.

### 1701-351—Linear Algebra

3 hrs. cr.

The algebra of linear equations and matrices, vector spaces, linear mappings and transformations, determinants, bilinear and quadratic forms, linear functionals, vector inner products and cross products. Prerequisite or corequisite: Math 300.

### 1702-361—Probability and Statistics

3 hrs. cr.

Introduction to theory of probability and statistics using concepts and methods of calculus. The binomial and Poisson probability measures. The central limit theorem. Prerequisite: Math 260.

### 1701-412—Vector Analysis

3 hrs. cr.

Vector spaces, linear transformation, determinants, eigenvalues and diagonalization of symmetric matrices, curl, divergence, gradient, multiple integrals and the theorem of Green, Gauss and Stokes. Prerequisite: Math 260.

### 1701-421—Advanced Calculus I

3 hrs. cr.

A rigorous review of elementary calculus: Real number systems, continuous functions, functions of several variables, implicit functions. Prerequisite or corequisite: Math 300.

### 1701-422—Advanced Calculus II

3 hrs. cr.

Coordinate transformations, vectors, multiple integrals, Green's theorem, theory of integration, differential equations, Fourier Series. Emphasis on theory rather than applications. Prerequisite: Math 421.

### 1701-431—Numerical Analysis

3 hrs. cr.

Digital computer programming, finite differences, numerical integration, matrix computation, numerical solution of non-linear differential equations. Solution of many problems on a digital computer. Prerequisite or corequisite: Math 322 and Comp 120.

### 1799-498—Seminar in Mathematics

1-3 hrs. cr.

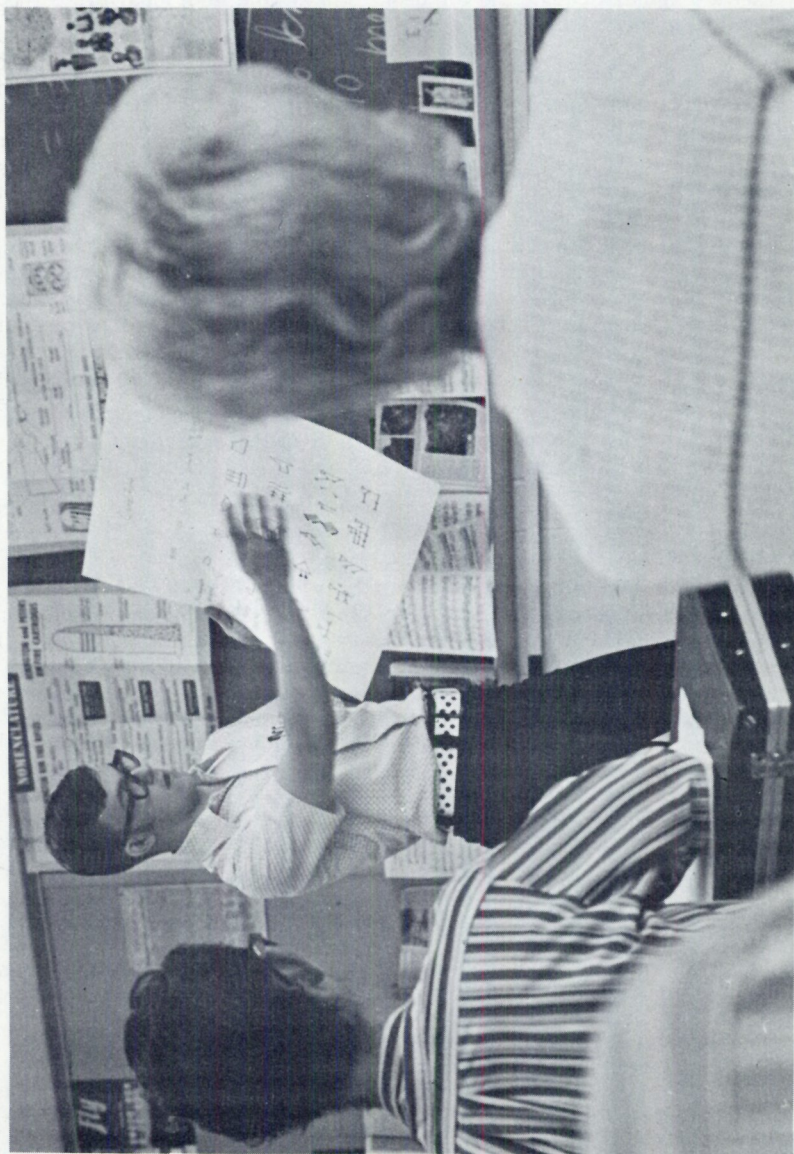
A seminar for upper division math or related majors. The class meets regularly each week. Meeting times per week are equal to the number of credit hours determined by the department for a given semester. The course is designed to give both broad and specialized knowledge of the discipline. Prerequisite: Advanced standing in major field and consent of department head.

## COURSES OF INSTRUCTION

### 1799-499—Independent Study

1-3 hrs. cr.

An independent study course structured by the adviser with approval of the department head. Prerequisite: Advanced standing in the major field with a grade point average of 3.0. Registration in the course must be approved by adviser and department head.





# MUSIC

## Division of Arts and Sciences

Chapman, Elliott, Harrell, Harris, D. Johnson, Sims

The Department of Music offers courses leading to the degrees of Bachelor of Arts and Bachelor of Science in Education in Music. The Bachelor of Arts degree includes 48 required hours of music. Required courses are Music 111-112, Music 221-222, Music 351-352, Music 421, Music 431, Music 181-181, Music 441, 12 hours of Applied Major, 4 hours of Applied Piano, 8 hours Large Ensemble. The keyboard major may elect an additional 4 hours in lieu of the Applied Piano requirement. Music 351 or Music 352 may be used as partial fulfillment of Humanities and Fine Arts general education requirements. Departmental requirements will not exceed 55 credit hours.

The Bachelor of Science in Education Degree includes 60 hours in music. Required courses are: Music 111-112, Music 221-222, Music 421, Music 431, Music 351-352, Music 131, Music 262, Music 371, Music 411, Music 181, Music 182, Music 441, Music 231, Music 232, Music 361, Music 362, 7 cr. hrs. of Large Ensemble, 10 cr. hrs. of Applied Major. All music education majors must complete two semesters of Applied Piano. This requirement may be waived by successful performance proficiency as determined by the department.

The student must meet departmental requirements for recital. Departmental requirements shall not exceed 65 credit hours.

All music majors must perform in a large ensemble during each semester of residency as follows: Vocal major-choir 121-122, Wind and percussion major-Band 191-192, String major-Orchestra 151-152, Keyboard major--Any large ensemble with permission of instructor.

This program enables the student to fulfill the present requirements for certification to teach elementary and secondary, vocal and instrumental music. See page 97 for teacher education requirements.

### 1006-110—Music Appreciation

3 hrs. cr.

Designed to give the non-music major an insight into musical masterpieces from all eras of music literature.

### 1004-111—Music Theory

3 hrs. cr.

Study of basic fundamentals of music with initiation of harmonic analysis and part-writing. Basic course for music majors; others by consent of the instructor.

### 1004-112—Music Theory

3 hrs. cr.

Sequential course in written harmony, including inversions, seventh chords, and non-harmonic tones. Prerequisite: Music 111. Three meetings per week.

### 1004-121—Choir

1 hr. cr.

Open to all college students by audition only. Preparation and performance of great choral works. Prerequisite: Permission of the instructor.

## **COURSES OF INSTRUCTION**

- 1004-122—Choir** 1 hr. cr.  
Continuation of 121.
- 0832-131—Introduction to Professional Music Education** 1 hr. cr.  
A course designed to orient the student to the profession of music education.
- 1004-141—Lab Band** 1 hr. cr.  
A stage band open to all students who are qualified instrumentalists. The Lab Band will prepare and present several concerts during the year, while dealing primarily with music of the jazz idiom. Prerequisite: Permission of the instructor.
- 1004-142—Lab Band** 1 hr. cr.  
Continuation of 141.
- 1004-151—Orchestra** 1 hr. cr.  
Open to all college students who play an orchestral instrument. The orchestra will present public concerts, performing standard orchestral literature. Prerequisite: Consent of instructor.
- 1004-152—Orchestra** 1 hr. cr.  
Continuation of 151.
- 1004-161—Vocal Ensemble** 1 hr. cr.  
Small select ensemble from the membership of the college choir. Performs all literature from madrigal to modern music, written for small vocal ensemble. Prerequisite: Membership in choir.
- 1004-162—Vocal Ensemble** 1 hr. cr.  
Continuation of 161.
- 1004-171—Brass Choir** 1 hr. cr.  
Open to all students with band instrument experience. Performance of literature for brass ensemble. Two meetings per week.
- 1004-172—Brass Choir** 1 hr. cr.  
Continuation of 171.
- 1004-180—Choral Society** no credit  
Open to all college students and area adults. The purpose of this course is to offer choral experiences for all college students and adults not eligible for the Chorale. Concerts will be scheduled throughout the year at the discretion of the conductor.
- 1004-181—Choral Conducting Techniques** 1 hr. cr.  
Technique of baton, factors in interpretation, score reading, rehearsal procedures for choral organizations, program building, and public appearances.



## MUSIC

### 1004-182—Instrumental Conducting Techniques

1 hr. cr.

Techniques of baton, factors in interpretation, score reading, rehearsal procedures for instrumental organizations, program building, and public appearances. Laboratory work with the college Concert Band or Orchestra.

### 1004-192—Concert Band

1 hr. cr.

Open to all qualified students with band instrument experience. Rehearsal and public performances based upon study and preparation of composite repertoire for this media. Prerequisite: Permission of instructor.

### 1004-221—Music Theory

3 hrs. cr.

Modulation, diatonic seventh chords, altered chords, advanced part-writing procedures. Prerequisite: Music 112.

### 1004-222—Music Theory

3 hrs. cr.

Secondary dominant chords, augmented triads and sixth chords, advanced modulation, introduction to contemporary techniques. Prerequisite: Music 221. Three meetings per week.

### 0832-262—Music for the Elementary School

3 hrs. cr.

Emphasis on methods of teaching music in the elementary classroom and a study of materials to be used.

### 1006-351—History of Music

3 hrs. cr.

General survey of history of music from Greek period to 18th century.

### 1006-352—History of Music

3 hrs. cr.

From 18th century to the present. Score reading required.

### 0832-371—Music in the Public School

3 hrs. cr.

A course designed to acquaint the music education major with the problems of the administration and supervision of the school music program through the high school level. The content includes the place of music in the school program, music equipment, schedules, budget, instructional problems, and public relations in music.

### 1004-411—Marching Band Techniques

1 hr. cr.

Study of procedures needed in organization, promotion, equipping, rehearsing and performance of a marching band. Includes study of musical repertoire and charting of field maneuvers. For music majors; others by consent of instructor.

### 1004-421—Form and Analysis

3 hrs. cr.

Harmonic and form analysis of compositions from classic era, formal analysis of compositions from pre-classic era, and introduction to contemporary principles. Prerequisite: Music 222.

### 1004-431—Orchestration

2 hrs. cr.

Capacities of orchestral instruments. Scoring for various orchestral combinations, including full orchestra. Prerequisite: Music 222.

## COURSES OF INSTRUCTION

### 1004-441—Advanced Conducting Techniques

2 hrs. cr.

To prepare the student to successfully handle some of the more difficult conducting skills. Includes irregular beat patterns, advanced technical problems and methods developed for solving them. Prerequisites: Music 181, Music 182.

### Instrumental Techniques

2 hrs. cr.

#### 1004-231 String Techniques

#### 1004-232 Brass Techniques

#### 1004-361 Percussion Techniques

#### 1004-362 Woodwind Techniques

Class instruction in the orchestral and band instruments, including a study of methods and materials to be used in the teaching of a beginning student.

### 101 to 408—Applied Music

1-2 hrs. cr.

#### 1004-101

#### 1004-102

#### 1004-203

#### 1004-203

#### 1004-305

#### 1004-306

#### 1004-407

#### 1004-408

Private instruction in piano, organ, voice, trumpet, trombone, French horn, violin, viola, cello, double bass, flute, clarinet, oboe, saxophone, bassoon, and percussion. Credit variable. One hour lessons per week in major. Jury examination required. Lessons by arrangement with approved instructors.





# NURSING

## Division of Technology

Elgin, Ketchum, Legg, Logue, Wood

Missouri Southern State College offers a program leading to an Associate of Science Degree in Nursing. Satisfactory completion of the requirements for this degree qualifies the person to write the State Board of Nursing Examination for licensure as a Registered Nurse (R.N.).

Admission to Missouri Southern State College does not automatically confer admission to the nursing program. In addition to meeting admission requirements for the College, candidates who are interested in a career in nursing as a Registered Nurse (R.N.) are required to apply for admission to the Department of Nursing. The application form may be obtained from the Department of Nursing office, Kuhn Hall. Applications should be submitted prior to May 1 preceeding the Fall Semester which you wish to enter. Each application is reviewed by the Admission Committee for the Department of Nursing.

In determining a candidates' eligibility for admission basic qualifications compatible with the profession of nursing are given consideration including test results, scholarship, physical, mental, emotional health and character references establishing personal abilities.

Based upon the Committee's evaluation each applicant is placed in one of three categories: 1) Approved for Admission; 2) Approval on condition that certain stated requirements are met; or 3) Advised not to pursue the program in nursing.

The Associate of Science Degree in Nursing requires a minimum of 72 semester hours. The required courses are: Nurs 100, Nurs 120, Nurs 130, Nurs 210, and Nurs 240. Supporting science courses required include: Soc 110, Psy 100, Bio 221, Bio 231, and Chem 100. Courses to complete general education requirements (see page 66) should be selected with advisor approval. Nursing courses must be earned in the prescribed sequence and supporting science courses should be earned in the prescribed sequence (see page 190.)

Supervised clinical laboratory periods are an integral part of each nursing course. During clinical laboratory periods students give direct care to patients under the guidance of the nursing faculty. Clinical laboratory periods are conducted in a variety of community health agencies. Three major agencies include: Freeman Hospital, St. John's Medical Center, Joplin, and St. John's Hospital, Springfield, Missouri.

### 5208-100—Fundamentals of Nursing

5 hrs. cr.

Provides an orientation to nursing through a brief study of nursing history, concepts of health-illness and health care delivery.

An overview of pharmacology and the components of the nursing process are presented with application of assessment and intervention in nutrition, elimination, activities of daily living and commonly prescribed therapeutic measures.

Consideration of the individual is approached through concepts of family development, emotional needs, spiritual needs and resources in relation to



## **COURSES OF INSTRUCTION**

health, illness and dying.

Three (3) hours lecture, four (4) hours of classroom lab, four (4) hours clinical lab, including pre and post conferences.

### **5208-120—Nursing in Physical Illness I**

**9 hrs. cr**

The course is planned for the study of the adult person whose care requires medical and/or surgical intervention. Continued use of the problem-solving approach in more complex nursing situations enables the student to apply new and previously acquired knowledge and skills. Principles and concepts of rehabilitation, diet therapy, and pharmacology are correlated. A study of physical, mental and developmental concepts of the adult through senescence is included. Pre and post conferences are planned with the supervised clinical experience. Five (5) hours lecture; twelve (12) hours clinical laboratory. Prerequisite: Nurs 100 with minimum grade of C.

### **5208-130—Nursing in Mental Illness**

**4 hrs. cr.**

The course is designed to assist the student to gain increased knowledge of mental health concepts. The student is given the opportunity to gain increased knowledge and skill in communications. Laboratory experiences are planned to help the student gain an understanding of the effect of mental illness on normal adult development and application of nursing principles to the care of the mentally ill adult. Four (4) hours lecture; twelve (12) hours of clinical laboratory. Prerequisite: Nurs 120 with minimum grade of C.

### **5208-210—Maternal and Child Health**

**10 hrs. cr.**

Family centered course with emphasis on the nursing care of mothers during the maternity cycle. Normal growth and developmental and mental health concepts during this period of the life cycle are included. Emphasis is on individualized care in health and disease. Pre and post conferences are planned with the supervised clinical experience. Five hours lecture; fifteen hours of clinical laboratory. Prerequisite: Nursing 130, with minimum grade of C.

### **5208-240—Nursing in Physical Illness II**

**10 hrs. cr.**

Continuation of Nursing 120. Intended to help the student to further develop knowledge and skills necessary to provide individualized nursing care of the adult patient. Study of major health problems is continued with consideration of prevention, diagnosis, treatment, rehabilitation, and nursing care. Consideration is given to physiological, cultural, socio-economic, and developmental factors which may cause, complicate or affect the patient's treatment. Includes preparation for responsibilities and opportunities as a graduate nurse. Pre and post conferences are planned with the supervised clinical experience. Five hours lecture; fifteen hours of clinical laboratory. Prerequisite: Nursing 210, with minimum grade of C.



# **OFFICE ADMINISTRATION**

## **Division of Business Administration**

Compton, Cowan, Miner

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree and a Bachelor of Science in Business Education degree.

The requirements for the Technology Programs leading to Certificates of Achievement and Associate of Science degrees are found on page 156.

### **0514-101—Elementary Typewriting 3 hrs. cr.**

The chief emphasis in this course is to learn to manipulate the typewriter efficiently. The development of speed is stressed so that the student will, upon completion of the course, have a fair rate which will be of use to him personally. A few simple letter styles are taught as well as manuscript writing and simple tabulation.

### **0514-102—Intermediate Typewriting 3 hrs. cr.**

This is primarily a letter writing course. All the styles of business and personal letters are studied and written. Efficient methods of writing more difficult manuscript and tabulations are also studied. Minimum requirement for passing is the ability to type 40 words per minute for five minutes with the 5-error limit. Prerequisite: OA 101 or a good knowledge of the keyboard.

### **0514-111—Elementary Shorthand 3 hrs. cr.**

A theory course in which the principles of shorthand are studied. Vocabulary building is stressed. Not open to students who have completed one year of shorthand in high school. Typewriting should precede or parallel the course. Class meets five days per week.

### **0514-120—Intermediate Shorthand 3 hrs. cr.**

A dictation course in which the theory has been completed. It is a review of theory, and special attention will be given to developing efficient transcription procedures. Dictation will range from 60 to 110 words per minute. The minimum speed requirement by the end of the semester is to write at least 80 words per minute with 95 per cent accuracy. Prerequisite: OA 111 or any course in which the theory has been completed.

### **0514-200—Advanced Typewriting 3 hrs. cr.**

Production of mailable letters, manuscripts, reports, addressing envelopes, business forms and legal typing is emphasized. Minimum passing requirement is 60 words per minute for five minutes with the 5 error limit. Prerequisite: OA 102 or the ability to type 40 words per minute and a knowledge of letter writing.

### **0514-210—Advanced Shorthand 3 hrs. cr.**

The emphasis in this course is to develop accuracy in transcription as well as to increase the rate of transcription. Dictation will range from 80 to

## **COURSES OF INSTRUCTION**

140 words per minute. The minimum requirement by the end of the semester is at least 100 words per minute with 95 per cent or more accuracy. Prerequisite: OA 120 or the ability to take dictation at 80 words per minute.

### **0514-220—Dictation and Transcription**

**3 hrs. cr.**

This is a course for the development of expert stenographers. A great deal of emphasis is placed upon accuracy and rate of transcription, and production of mailable letters. Dictation will range from 100 words per minute to 160 words per minute. The minimum requirement by the end of the semester is at least 120 words per minute with at least 95 per cent accuracy.

### **0514-230—Secretarial Procedures**

**3 hrs. cr.**

Business ethics, secretarial duties common to all lines of business, such as handling mail, meeting callers, using the telephone, etc. The student receives instructions in the use of present day filing systems and their application to the various types of business. This course is offered for sophomores in the Office Administration curriculum. Freshmen may be admitted by permission of the instructor.

### **0838-336—Methods of Teaching Business**

**2 hrs. cr.**

Special methods of instruction problems, and difficulties peculiar to the teaching of each business subject; presentation of subject matter; content and arrangement of material, organization and administration. Prerequisite: At least one course in Education and one course in psychology. Two hours credit in Education

## **PHILOSOPHY**

**Division of Arts and Sciences**

**Department of Language and Literature**

**McCormick**

### **1509-201—Introduction to Philosophy**

**3 hrs. cr.**

Comparative survey of major types of philosophy, and of representative problems in philosophy.

### **1509-212—Ethics**

**3 hrs. cr.**

Exploration of the problem of value, personal moral attitudes and standards, comparative survey of major ethical systems, and evaluation of the chief ethical struggles in contemporary society.



# HEALTH, PHYSICAL EDUCATION AND RECREATION

## Division of Education and Psychology

Bogard, Calwhite, Davis, Frazier, Landrith, Roper,  
Shipley, Wade, Wuch, Yount

Students who desire certification as a teacher of health, physical education, and recreation may choose to become qualified at either the secondary level or a combination of both elementary and secondary levels. Students planning to major in this field should refer to page of this catalog where the Teacher Education Program is described. Students planning to teach at both elementary and secondary levels should select Plan B\*. Those desiring to make physical education one of two teaching fields should prepare under Plan A\*. The second teaching field must be selected from: art, biology, business education, chemistry, English, mathematics, physics, physical science, Spanish, or speech. The student will consult the specific department concerned for the requirements of the second teaching field.

Persons preparing to teach physical education in the public schools of Missouri may also be certified to teach health by completing: HPER 160, Bio 221, and HPER 370.

An area of concentration in **driver education** is offered in this department as a supporting area for those earning secondary level certification in any major area.

A certification program for **interscholastic coaches** is available for men who will be certified to teach at the secondary school level in any major area.

A major for the Bachelor of Science in Education degree with one teaching field (Plan B) consists of 46 semester hours. For men, the required courses are: Bio 221, HPER 150, HPER 251, HPER 252, HPER 310, HPER 331, HPER 312, HPER 342, HPER 350, HPER 351, HPER 352 or 360, HPER 370, HPER 410, HPER 431, HPER 450, and HPER 470. (A course in child psychology (Psy 200) or human development (Psy 110) is required for teachers of elementary school physical education.)

For women, the required courses are: Bio 221, HPER 150, HPER 251, HPER 252, HPER 310, HPER 312, HPER 321, HPER 322, HPER 332, HPER 342, HPER 370, HPER 410, HPER 431, HPER 450 or HPER 220, HPER 470. (A course in child psychology (Psy 200) or human development (Psy 110) is required for teachers of elementary school physical education.)

A major for the Bachelor of Science in Education degree with physical education as one of two teaching fields (Plan A) consists of 32 semester hours. For men the required courses are Bio 221, HPER 150, HPER 251, HPER 252, HPER 310, HPER 342, HPER 431 or 470, and HPER 450. Select 6 hours from HPER 332, HPER 350, HPER 351, HPER 352, and HPER 360.

For women, the course requirements are: Bio 221, HPER 150, HPER 251, HPER 252, HPER 310, HPER 321, HPER 322, HPER 342, HPER 431 or 470, and HPER 450 or 220.

\*Persons planning to major in Physical Education should go to the physical education office to secure a sheet detailing the course requirements for the curriculum.



## **COURSES OF INSTRUCTION**

**0835-150—Introduction to Professional Physical Education 2 hrs. cr.**

A course designed to orient the student to the profession of physical education. Attention is given to the development and philosophy of Physical Education.

**0837-160—Personal Health 2 hrs. cr.**

Study of health problems of the individual, body, mechanics, nutrition, drugs and drug abuse, sex hygiene, mental hygiene, and the cause and prevention of common diseases. Not recommended for elementary education majors.

**0835-251—Fundamentals of Physical Education Activities I 4 hrs. cr.**

Study of the skills and understandings of selected activities: games, sports and rhythms commonly found in the school program. Students are required to demonstrate minimum levels of proficiency in the various activities. A student may be required to enroll in an activity course in any area of weakness taught by a team composed of members of both the men's and women's physical education departments. Meets for two periods daily. (Either HPER 251 or 252 may be replaced with 5 semester hours of different activity courses, with permission of department head.) Enrollment restricted to H.P.E. majors.

**0835-252—Fundamentals of Physical Education Activities I 4 hrs. cr.**

Study of the skills and understandings of selected activities: games, sports and rhythms commonly found in the school program. Students are required to demonstrate minimum levels of proficiency in the various activities. A student may be required to enroll in an activity course in any area of weakness taught by a team composed of members of both the men's and women's physical education departments. Meets for two periods daily. (Either HPER 251 or 252 may be replaced with 5 semester hours of different activity courses, with permission of department head.) Enrollment restricted to H.P.E. majors.

**0835-310—The Elementary School Physical Education Program 3 hrs. cr.**

A course designed to familiarize the student with the procedures and techniques for planning the curriculum for elementary school physical education. (P.E. majors only.)

**0835-311—Physical Education for the Elementary School 2 hrs. cr.**

Study of the methods and materials needed in directing the activity program of games, skills, rhythm, and stunts for the elementary school child. Designed for men and women who are candidates for the elementary level teaching certificates.

**0835-312—Teaching Elementary School Physical Education 2 hrs. cr.**

Analysis of basic movement patterns, basic skills, rhythmic and game activities with detailed explanations of presentation to the elementary school child. Prerequisites: HPER 310 (P.E. majors only.)



## **HEALTH, PHYSICAL EDUCATION & RECREATION**

### **0835-321—Theory and Analysis of Selected Team Sports 3 hrs. cr.**

A professional course designed for physical education teachers with emphasis on organizing, officiating, and performing of individual sports. Women only. Prerequisite: HPER 150 and 252.

### **0835-322—Theory and Analysis of Selected Individual Sports 3 hrs. cr.**

A professional course designed for physical education teachers with emphasis on organizing and performing of team sports. Field and play days are covered. Women only. Prerequisite: HPER 252.

### **0835-331—Theory and Analysis of Selected Team Sports 2 hrs. cr.**

A professional course designed for physical education teachers with emphasis on organizing, officiating, and performing of team sports. Men only. Prerequisite: HPER 252.

### **0835-332—Rhythmic Form and Analysis 2 hrs. cr.**

Analysis of dance forms showing how complex music and dance forms are evolved. Prerequisite: Activity course in dance.

### **0835-340—Motor Learning in Physical Education 3 hrs. cr.**

Study of motor learning to provide the teacher with the background necessary for developing a physical education program that meets the needs of the physically and mentally handicapped. Prerequisite: HPER 310, 311, or permission of instructor.

### **0835-342—Kinesiological Approach to Movement 3 hrs. cr.**

A mechanical and kinesiological approach to the movement of average and exceptional individuals in various activities. Prerequisite: Bio 221 or equivalent and HPER 252.

### **0835-350—Theory of Basketball 2 hrs. cr.**

Organization and management of the secondary school basketball program. Systems of offense and defense in basketball. Study of rules, training schedule, discussion of problems arising during training and regular playing season. Prerequisite: HPER 252.

### **0835-351—Theory of Football 2 hrs. cr.**

Attention to team play, systems of offense and defense, field strategy, discussion of rules, training and equipment. Prerequisite: HPER 252.

### **0835-352—Theory of Track and Spring Sports 2 hrs. cr.**

Organization and administration of meets, coaching, physical conditioning and training for each event including track and field programs. Golf, tennis, and other spring interscholastic sports are also included. Prerequisite: HPER 252.

### **0835-360—Theory of Baseball 2 hrs. cr.**

Organization and management of a school baseball program to individual techniques, team play and problems in coaching of baseball. Prerequisite: HPER 252.



## **COURSES OF INSTRUCTION**

### **0837-370—School and Community Health Education 3 hrs. cr.**

Study of the content, facilities, and equipment needed for teaching school and community health. The course is concerned with the health of the individual and of groups. Should be taken by all elementary education majors in place of HPER 160. Separate sections are usually taught for elementary majors. Prerequisite: 5 hrs. Biology.

### **0835-410—Principles and Philosophy of Physical Education 3 hrs. cr.**

A study of the changing role of physical education as indicated by its historical past and as evidenced through the influence of the various philosophies. Prerequisite: HPER 150 and 252.

### **0835-431—Supervision of Interscholastic Programs 3 hrs. cr.**

Study of the organization and management of athletic programs in schools, staff functions, student leadership, facilities, equipment, health and legal aspects. Rules and regulations of interscholastic activities and techniques of officiating are studied. Officiating laboratory work is required. Prerequisite: HPER 150 and 252.

### **0835-450—Prevention and Care of Injuries 3 hrs. cr.**

Laboratory experiences in the care and prevention of athletic injuries. Includes first aid training. Prerequisite: Bio 221 and HPER 342. Enrollment limited to physical education majors.

### **0835-470—Administration of Physical Education 3 hrs. cr.**

Organizations and management of health and physical education in schools, scheduling, personnel, curriculum, finance, equipment and facilities. The intramural program will be studied in detail. Prerequisite: 20 hr. HPER.

### **0835-498—Seminar in Health or Physical Education 1-3 hrs. cr.**

A thorough study of an advanced problem in health or physical education for selected students. Prerequisite: Senior standing, permission of department head.

### **0835-499—Independent Study 1-3 hrs. cr.**

Research of a problem or field study relating to physical education; material, content, credit and schedule to be arranged by the department head. Prerequisite: Senior standing, 3.0 grade point average in major, and permission of department head.

## **DRIVER EDUCATION**

To meet the Missouri teacher certification requirements as a driver education instructor the following courses are required: HPER 220, HPER 230, HPER 361, HPER 362, and Auto 150. Also required are at least 2 hours selected from the following: Psy 210, Psy 221, Educ 370, and Educ 420. Driver education may be selected as a minor area for any person planning to teach at the secondary level under Plan B. Persons under Plan A can obtain certification for driver education also, but this certification must be



## **HEALTH, PHYSICAL EDUCATION & RECREATION**

in addition to their other two teaching fields.

### **0836-220—First Aid**

**2 hrs. cr.**

Designed to complete the standard course of the American Red Cross in First Aid.

### **0836-230—Safety**

**2 hrs. cr.**

A course aimed at developing concepts which are basic to safety education and for preparing the student to assume responsibility for accident prevention in the school, home, and community.

### **0836-361—Introduction to Driver Education**

**3 hrs. cr.**

The first of two courses designed to prepare teachers of driver education for secondary schools. The place of the motor vehicle in American life; traffic safety; instructional materials and recommended methods of presenting such materials and recommended methods of presenting such materials in the classroom and in the car on the road; laboratory work with beginning drivers. Prerequisites: Psy 210. Students must have: (1) a valid driver's license and (2) a safe driving record.

### **362—Advanced Driver and Traffic Safety**

**3 hrs. cr.**

A continuation of 361 with special attention given to administration, organization, finance, adult education, research, and evaluation of the school driver education program. Traffic safety problems at the local, state and national levels are also considered. Laboratory required. Prerequisite: HPER 361.

## **RECREATION**

### **390—Introduction to Recreation**

**3 hrs. cr.**

A study of the recreation movement in America with a special insight into the development of community recreation departments and programs.

### **391—Recreational Leadership**

**3 hrs. cr.**

A study of the qualities which make for effective leadership and a look at the role of the recreation leader. Prerequisite: HPER 390.

## **COACHING CERTIFICATE\***

The coaching certificate has been established to provide an opportunity for students other than physical education majors to become certified coaches in the State of Missouri. To earn the certificate the student should have a background in athletics and complete a total of 15 semester hours plus any prerequisite. The required courses are as follows: HPER 220, HPER 331, HPER 342. Select 6 hrs. from: HPER 350, HPER 351, HPER 352, HPER 360.

\*This certificate does not permit the individual to teach physical education.

## COURSES OF INSTRUCTION

### THE ACTIVITY PROGRAM IN PHYSICAL EDUCATION

The activity program in physical education has two basic objectives. It has the purpose of offering a program that will provide the student with the opportunity to develop a degree of skill sufficient to create interest and participation in this activity during leisure time in the adult years. A second important purpose is to provide the student with the necessary knowledge of philosophical, psychological, physiological and sociological nature of physical activity to comprehend the necessity of continued physical health throughout his lifetime.

To insure exposure to the various recreational activities, the College had adopted the following requirements:

All freshmen women and men (except physical education majors; should enroll in HPER 101 during the first semester and HPER 102 during the second semester. Students are required to complete two additional activity courses of their choice or to complete HPER 160. All persons planning to teach in the elementary schools of Missouri must complete either HPER 160 or HPER 370.

Physical Education majors will be required to enroll in HPER 150 during their freshman year and HPER 251 and HPER 252 during their sophomore year. Varsity athletes should also enroll in the sport of their choice which will replace any activity course requirement except HPER 101 and 102.

A uniform prescribed by the division is to be furnished by each student and is a course requirement.

### ACTIVITY COURSES

Course No.	Hrs. Cr.
0835-100C Individual Physical Education (Therapeutic) .....	2
0835-101M Introduction to Physical Activities I .....	1
0835-101W Introduction to Physical Activities I .....	1
0835-102M Introduction to Physical Activities II .....	1
0835-102W Introduction to Physical Activities II .....	1
0835-161M Varsity Football .....	1
0835-162M Varsity Basketball .....	1
0835-171M Varsity Cross Country .....	1
0835-172M Varsity Track and Field .....	1
0835-180M Varsity Golf .....	1
0835-182M Varsity Baseball .....	1
0835-192M Varsity Tennis .....	1
0835-201W Bowling and Field Hockey .....	1
0835-210C Golf and Badminton .....	1
0835-215M Bowling and Flag Football .....	1
0835-222C Varsity Sports and Activities .....	1
0835-231C Elementary Gymnastics and Tumbling .....	1
0835-232C Intermediate Gymnastics .....	1
0835-240C Fencing and Archery .....	1
0835-241M Soccer, or Speedball and Basketball .....	1
0835-242M Wrestling or Boxing and Softball .....	1
0835-240C Social Dance .....	1



## HEALTH, PHYSICAL EDUCATION & RECREATION

0835-261C	Elementary Swimming.....	1
0835-262C	Intermediate Swimming.....	1
0835-270C	Advanced Swimming (Senior Life Saving).....	1
0835-280C	Water Safety Instruction (Prereq. HPER 270).....	1
0835-281C	Elementary Modern Dance.....	1
0835-282C	Intermediate Modern Dance.....	1
0835-290C	Recreational Activities.....	1
0835-292C	Track, Weight Training.....	1

Unless otherwise noted, courses listed above have separate sections for women and men. The letters M, W, and C will be added to the course number of the schedule to indicate the designated sections. M indicates the course is for men only. W indicates the course is for women only. C indicates the course is coed.





# PHYSICS

## Division of Arts and Sciences

Phillips, Sloan, Strobel

A major for the Bachelor of Science degree in Physics consists of 36 semester hours in physics plus 18 additional hours in mathematics. The required courses are: Phys 250, Phys 260, Phys 301, Phys 322, Phys 341, Phys 372, Phys 381, Phys 401, Phys 452 or Phys 480, Phys 498, Math 150, Math 250, Math 260, and Math 322. The following courses are recommended but not required: Chem 101, Chem 102, Comp 120, Comp 130, Math 351, Math 412, Math 431, and Phys 490. Students who plan to seek an advance degree in engineering should plan a minimum of one year at a major university for a masters degree and two years for both the bachelor and master degrees in engineering. See suggested order of study for engineering guidelines (page 185).

A major for the Bachelor of Science in Education degree with physics as a single teaching field (Plan B) consists of 25 semester hours of physics plus 15 additional hours in mathematics. The required courses are: Phys 250, Phys 260, Phys 301, Phys 322, Phys 381, Phys 498, Math 150, Math 250 and Math 260. Four upper division additional elective hours in physics are also required. The following courses are recommended but not required: Chem 101, Chem 102, Comp 120, Geol 110 and Phys 372.

A major for the Bachelor of Science in Education degree with physics as one of two teaching fields (Plan A) consists of 21 semester hours of physics plus 15 additional hours in mathematics. The required courses are: Phys 250, Phys 260, Phys 301, Phys 322, Phys 381, Phys 498, Math 150, Math 250 and Math 260. The following courses are recommended but not required: Chem 101, Chem 102, Comp 120, Phys 372 and Geol 110.

## Physical Science

A major for the Bachelor of Science in Education degree with a double teaching field in physics and chemistry consists of 21 hours of chemistry and 21 hours of physics, 5 hours of Geology, plus mathematics through Math 260. The required courses are: Phys 250, Phys 260, Phys 301, Phys 381, Phys 498, Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Geol 110, Math 150, Math 250, Math 260, plus 3 hours of upper division electives in physics. See page 97 for teacher education requirements.

The requirements leading to an Associate of Arts degree in pre-engineering are found on page 161.

### 1901-100—Fundamentals of Physical Science

5 hrs. cr.

Basic concepts in the fields of physics, chemistry, geology, and astronomy. Emphasis on such environmental topics as energy reserves, chemical and thermal pollution, transportation nets, fossil and nuclear power generation, and population. Lecture and demonstration periods. Prerequisite: Math 30 with a minimum grade of C or qualified for Math 110 on the MMPT.



**1902-381—Intermediate Physics Laboratory** 3 hrs. cr.

Experiments in classical and modern physics, including wave phenomena, heat transfer, electrical measurements, optics, photo-electric effect and radioactivity. Two 3 hour laboratories per week. Prerequisite: Phys 301 or permission of instructor.

**1902-401—Electricity and Magnetism** 4 hrs. cr.

Includes study of electrostatic forces, electric fields, electric potential, properties of conductors and dielectrics, magnetic fields, magnetic properties of matter, induced electromotive force, electric circuits, Maxwell's equations and electromagnetic waves. Four hours of lecture per week. Prerequisites: Math 260 and Phys 260.

**1902-452—Quantum Mechanics** 3 hrs. cr.

Time independent Schroedinger equation, eigenfunctions, expectation values, differential operators, perturbation theory, multi-electron atoms and applications to solid state physics. Three hours of lecture per week. Prerequisite: Phys 301 and Math 322.

**1902-498—Seminar** 1-3 hrs. cr.

Topics of current interest elected by the student from the areas of physics and engineering. The course will also include several visits to nearby universities to attend colloquiums. Secondary education majors will be required to present several lecture-demonstration programs illustrating the basic concepts in physics at the secondary level. Open to students having a minimum of 18 hours of physics and permission of the instructor.

**1902-499—Selected Topics in Physics and Engineering** 3 hrs. cr.

Students may select one or more of the following topics for further study: Solid State Physics, Optics, Nuclear Physics, Advanced Mechanics, Circuit Analysis and Fluid Mechanics and Heat Transfer.

THE STATE OF NEW YORK  
IN SENATE  
JANUARY 1, 1901.

REPORT  
OF THE  
COMMISSIONERS OF THE LAND OFFICE  
IN RESPONSE TO A RESOLUTION PASSED BY THE SENATE  
MAY 1, 1899.

ALBANY:  
J. B. LEECH, STATE PRINTER.  
1901.

THE LAND OFFICE  
OF THE STATE OF NEW YORK  
HAS THE HONOR TO ACKNOWLEDGE THE RECEIPT OF  
A COPY OF THE REPORT OF THE COMMISSIONERS OF THE LAND OFFICE  
IN RESPONSE TO A RESOLUTION PASSED BY THE SENATE  
MAY 1, 1899.

AND TO CERTIFY THAT THE SAME HAS BEEN  
FILED IN THE OFFICE OF THE COMMISSIONER OF THE LAND OFFICE  
THIS 10TH DAY OF JANUARY, 1901.



## PHYSICS

### 1902-151—Elementary College Physics I

5 hrs. cr.

Study of mechanics, properties of matter, heat, wave motion, sound, electrical circuits, and radioactivity. Four hours of lecture and one 2-hour laboratory per week. Prerequisites: Math 140 or Math 130 and permission of the instructor.

### 1902-152—Elementary College Physics II

3 hrs. cr.

Magnetism, optics, relativity, nuclear reactions and further study of mechanics including rotational dynamics. Two hours of lecture and one 2-hour laboratory per week. Prerequisite: Phys 151.

### 1902-250—General Physics I

5 hrs. cr.

0 Includes the study of mechanics, properties of matter, heat, wave motion and sound. The conservation laws of physics are emphasized. Four hours of lecture and one three-hour laboratory per week. Corequisite: Math 150.

### 1902-260—General Physics II

5 hrs. cr.

A study of electricity, magnetism, and light, with introductions to quantum properties of radiation and matter. Four hours of lecture and one three-hour laboratory per week. Prerequisite: Phys 250. Corequisite: Math 250.

### 1902-301—Modern Physics

4 hrs. cr.

Wave motion, special theory of relativity, wave-particle experiments, introductory quantum mechanics, and nuclear physics. Prerequisite: Physics 260. Corequisite: Math 260.

### 1902-322—Classical Mechanics

3 hrs. cr.

Kinematics and dynamics of particles and systems of particles including the harmonic oscillator, potential functions, conservative fields of force, central force motion, energy, gravitation, rigid bodies and an introduction to the mechanics of continuous media. Three hours of lecture per week. Prerequisite: Phys 260. Corequisite: Math 322 or permission of instructor.

### 1902-341—Thermal Physics

4 hrs. cr.

Temperature, transfer of heat, laws of thermodynamics, entropy, enthalpy, reversibility and irreversibility, thermal properties of materials, low temperature physics, change of phase, kinetic theory, and statistical mechanics. Four hours of lecture per week. Prerequisites: Math 260 and Phys 260.

### 1902-372—Electronic Circuits

4 hrs. cr.

Circuit analysis, resonance, tube and transistor characteristics, power supplies, amplifiers, and oscillators. Two three-hour lectures and lab per week. Presently limited to 15 students by equipment considerations. Prerequisite: Phys 260. Corequisite: Math 260.

# **POLITICAL SCIENCE**

## **Division of Arts and Sciences**

Evans, St. Clair, Steinsberger, Youst

Students who plan to do graduate study after completing the baccalaureate degree and/or who plan to enter government of community service will want to take the Bachelor of Arts degree. A political science major for this degree consists of 30 semester hours in Political Science. The student will select these courses in consultation with his adviser.

A political science minor consists of 20 semester hours in Political Science. For the minor the student will also select these courses in consultation with his adviser.

A social science major for the Bachelor of Science in Education degree, with an emphasis in Political Science (Plan B) consists of 47 semester hours. The requirements are: Hist 110, Hist 120, Hist 200, Hist 201 or 202, 6 hours of upper division History courses, 3 hours of European and 3 hours of U.S. History, PSc 120. For the remaining 23 hours the student will take Econ 201, 3 hours in Geography, 3 hours in Sociology and 7 hours in upper division Political Science courses. See page 97 for teacher requirements. requirements.

**2207-120—Government: National, State, Local** 3 hrs. cr.

A study of the National, State and Local governments in the United States, including the state of Missouri.

**2207-231—Introduction to Political Science** 3 hrs. cr.

A study of the discipline of Political Science which deals with the foundation, organization, development and principles of political science.

**2207-301—Political Parties and Elections** 3 hrs. cr.

A study of the origins, structure, and functions of political parties; the dynamics of the two-party system and the role of third parties. It also analyzes the election process. Prerequisite: Political Science 120.

**2207-302—Public Opinion and Pressure Groups** 3 hrs. cr.

The study of the nature of pressure and interest groups and their role in the formulation of public opinion and governmental policy. Prerequisite: Political Science 120.

**2207-311—The American Presidency** 3 hrs. cr.

The politics of presidential selection, the powers of the President, the organization of the executive branch and its relations with other organs of government. Prerequisite: Political Science 120.

**2207-312—The Legislative Process** 3 hrs. cr.

An introduction to the legislative process; problems of representation, organization of the legislature, participation, and proposals for improved organization. Emphasis is placed on legislatures at the national level. Prerequisite: Political Science 120.



## **POLITICAL SCIENCE**

### **2207-321—International Relations**

**3 hrs. cr.**

A study of the present-day relations and problems among the states of the world and the major factors which underline and influence these relations. Prerequisite: Political Science 120.

### **2207-331—Comparative Government**

**3 hrs. cr.**

A study of the governments of selected European countries with special attention given to development of their political systems both in theory and practice. A comparison with American governmental institutions is emphasized. Prerequisite: Political Science 120 or 231.

### **2207-342—Municipal Government**

**3 hrs. cr.**

A study of the structure, legal status, functions and organization of municipal governments in America. Prerequisite: 6 hours in Political Science.

### **2207-350—Criminal Law**

**3 hrs. cr.**

A study of the origins, development, application, and enforcement of criminal laws, their purposes and functions, and the rights and duties of public officials and citizens in relation to local, state and federal laws. The course is interdisciplinary in nature bringing together law enforcement students and political scientists in attempting to achieve a common understanding of crimes and punishment. The casebook method is used and students taking the course for upper level credit must complete additional research in the field of criminal law as required by the instructor. Prerequisite: Political Science 120.

### **2207-411—Political Theory**

**3 hrs. cr.**

A survey of selected Western Political philosophies from early recorded history through the present time. Prerequisite: 6 hours in Political Science.

### **2207-412—Contemporary Political Thought**

**3 hrs. cr.**

An examination of political ideas during the twentieth century. Prerequisite: 6 hours in Political Science.

### **2207-421—Public Administration**

**3 hrs. cr.**

A study of the nature, scope, and development of the American administrative system, the theory of organization, staff and auxiliary agencies, the chief executive, administrative relationships, and science in administration. Prerequisite: 6 hours in Political Science.

### **2207-432—Constitutional Law**

**3 hrs. cr.**

Development of the Government of the United States through judicial interpretation of the Constitution. Prerequisite: Political Science 120.

### **2207-499—Independent Study**

**3 hrs. cr.**

Selected readings designed to strengthen specific areas within the student's program, as recommended by the student's adviser. Prerequisite: 9 hours in Political Science and senior standing.

## **COURSES OF INSTRUCTION**

**2207-461—English Constitutional History** 3 hrs. cr.  
(See History 461)

**2207-462—United States Constitutional History** 3 hrs. cr.  
(See History 462)

**2207-498—Seminar in Political Science** 3 hrs. cr.

A study of analytical reports, research and discussions, designed to give a broad knowledge of the discipline and methods of Political Science. Prerequisite: 9 hours upper division Political Science and senior standing.

## **PSYCHOLOGY**

### **Division of Education and Psychology**

Dryer, Guilliams, Junkins, Starkey, Volskay, Willis

A major for the Bachelor of Arts degree consists of 32 semester hours. A supporting area of 15 hours is required and may be selected from the natural sciences or mathematics. Also, a supporting area of 15 hours may be selected from sociology/anthropology, business, computer science or special education, but each must be accompanied by 5 hours of natural science beyond the general education requirement. Required courses in psychology are: Psy 110, Psy 311, Psy 312, Psy 411, Psy 451, Psy 452.

A minor consists of 21 semester hours and must include Psy 411.

Chemistry 101 or Physics 151, Biology 120 and Math 130 should be taken to fulfill the general education requirements in the natural sciences and mathematics respectively. This will allow completion of the supporting area requirements with the least number of credit hours.

**2001-100—General Psychology** 3 hrs. cr.

An introductory course, stressing the importance of the psychological mechanisms underlying all mental processes, such as sensation, perception, emotion, thinking, and learning. A General Education requirement course. Education and Psychology majors should substitute Psy 110.

**2009-110—Psychology of Human Development** 5 hrs. cr.

An intensive study of the science of psychology; genetic, physiological, intellectual, social, and personality principles and concepts as they affect child and adolescent development and behavior. Observation laboratory required. Approximately one-half the course same as Psy 100. (Should be taken in place of Psy 100 by education and psychology majors. Fulfills General Education Requirements.)

**2001-120—Freshman Orientation** 1 hr. cr.

This course is designed to help the student become adjusted to the college environment. Beginning with personal adjustment and rules and



## PSYCHOLOGY

regulations, the course broadens its scope to vocational orientation. It culminates with the advising and enrolling of the student in classes for the next semester. No credit toward psychology major.

### **2009-200—Child Psychology**

**3 hrs. cr.**

Behavior and growth patterns of children are studied. Psychological facts and principles which are necessary for the understanding of the child in his home and school environment. Prerequisite: Psy 100.

### **2009-210—Adolescent Psychology**

**3 hrs. cr.**

A study of the development of the attitudes, interests, problems, and adjustment of the adolescent. A foundation for the proper evaluation of adolescent behavior. Prerequisite: Psy 100.

### **2001-221—Psychology of Personal Adjustment**

**3 hrs. cr.**

A study of the basic problems of personality adjustment. Intended to aid the student in promoting better mental health for himself and to better understand the behavior of others.

### **0811-302—The Exceptional Child**

**2 hrs. cr.**

Understanding and guiding the exceptional child through study of child growth and behavior. How to recognize and deal with specific problems of exceptional children. Prerequisite: 5 hrs. Psy.

### **0822-310—Educational Psychology**

**3 hrs. cr.**

Study of the psychological problems involved in education and the practical application of psychological principles of teaching. Special emphasis placed on measurement, the nature of learning, and the environmental influences of behavior. Prerequisite: Psy. 110; or Psy 100 and Psy 200 or Psy 210.

### **2007-311—Applies Statistics for the**

#### **Behaviorial and Natural Sciences**

**3 hrs. cr.**

The analysis and interpretation of data resulting from the conduct of experiments. Desk computer utilized for all techniques up to and including three-way ANOVA and multiple regression. Prerequisite: Psy 100 or Psy 110.

### **2002-312—Experimental Psychology**

**5 hrs. cr.**

A laboratory course emphasizing the study of animal behavior by scientific methods. Stresses experimental design and research techniques. Prerequisite: Psy 311.

### **2005-341—Social Psychology**

**3 hrs. cr.**

Study of the social behavior of the individual, interests and tendencies that grow out of the community life in terms of inter-group and inter-personal relationships. Prerequisite: Psy 311.

## **COURSES OF INSTRUCTION**

### **2001-411—Psychology of Sensation and Perception 3 hrs. cr.**

Nature of the perceptual processes and their relationship to the senses. A laboratory course. Prerequisite: 312 or consent of instructor.

### **0822-412—Measurement and Evaluation in Education and Psychology 2 hrs. cr.**

A study of test construction and item analysis. Practice in evaluating and selecting tests, in administering and scoring, and in the analysis and presentation of test results. Prerequisite: Psy 310 or Psy 311. (Offered in the professional semester.)

### **2001-422—Theories of Personality 3 hrs. cr.**

This course is to present an organized summary of the major contemporary theories of personality. Relevant validation research and over-all evaluation of the application of each theory will be considered. Prerequisite: Psy 100 or Psy 110, and consent of instructor.

### **2001-432—Abnormal Psychology 3 hrs. cr.**

The nature and etiology of the various forms of behavior disorder, mental deficiency, and other deviations. Critical evaluation of current theories. Visits to hospitals. Prerequisite: Seven hours of psychology.

### **2010-Psy 442—Physiological Psychology 3 hrs. cr.**

The study of brain function and brain-behavior relations with overviews of neuroanatomy, neurochemistry, nerve membrane potential, electrical and chemical aspects of synaptic transmission, sensory and motor aspects of brain function, and the integrative aspects of brain function in relation to behavior. Laboratory included. Prerequisite: Bio 120 and Psy 312, or equivalent and consent of instructor.

### **0822-451—Psychology of Learning 3 hrs. cr.**

Designed to acquaint the student with the major theories of learning. The theories will be analyzed, compared, and evaluated in the light of current research findings in the area of human and animal learning. Laboratory included. Prerequisite: Psy 310 or Psy 311.

### **2001-452—History and Systems of Psychology 3 hrs. cr.**

A study of the various systems of psychology based on historical antecedents and their effects on contemporary scientific psychology. Prerequisite: Psy 311, or consent of instructor.

### **2006-471—Group and Individual Intelligence Testing 5 hrs. cr.**

A study of the group and individual intelligence tests with practice in the administering and interpreting of the scores. Emphasis is placed on the Binet and Wechsler Scales. Prerequisite: Psy 412, or equivalent, and consent of instructor.

### **2099-498—Seminar in Psychology 1-3 hrs. cr.**

The seminar meets regularly each week. Meeting time per week is equal to the number of credit hours determined by the department for a given



## **SOCIOLOGY**

semester. The course is designed to cover specialized knowledge and/or current research in the discipline. Topics vary by semester and situation. Prerequisite: Advanced standing and consent of department head.

### **2099-499—Independent Study**

**1-3 hrs. cr.**

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field. Registration in the course must be approved by adviser and department head.

## **SOCIOLOGY**

### **Division of Arts and Sciences**

**Challman, Grant, Henderson, Wayman**

A Bachelor of Arts degree consists of 30 semester hours in sociology. The required courses are: Soc 110, Soc 212, Soc 311, Soc 321, Soc 421, and Soc 432. Within the 30 hours requirement at least 15 hours must be upper division courses. One course in general statistics or its equivalent is also required for completion of the A.B. program. An additional supporting area of 15 hours is required. The student selects this area in consultation with and by the approval of his advisor.

It is recommended that the student take Bio 120 in satisfying general education requirements, or Bio 100 and Bio 202. Until a course in Computer Science for the Social Sciences is made available Comp 100, Comp 110 and Comp 120 are suggested for students planning to go to graduate school.

Sociology may be used as a 21 hour minor or 15 hour supporting area with certain majors. The Bachelor of Arts student selecting sociology as a minor or supporting area should consider required courses suggested for A.B. sociology majors as a guideline. It is recommended that Bachelor of Science in Education majors taking sociology as a minor or supporting area select Soc 110, Soc 121 and Soc 212 plus upper division electives to satisfy the total hour requirements.

A social science major for the Bachelor of Science in Education degree, with emphasis in Sociology (Plan B), consists of 50 semester hours. The requirements are: Hist 110, Hist 120, Hist 200, Hist 201 or 202, and three upper division semester hours in U.S. History and three upper division semester hours in European History and Pol Sci 120, Econ 201, Geo 221 or 222, Soc 110, Soc 321 and electives in Sociology, 17 hours. Nine hours of the electives must be upper division. See page 97 for teacher education requirements.

### **2208-110—Introduction to Sociology**

**3 hrs. cr.**

An introduction to the systematic study of society. The emphasis is on the major concepts of sociology and the scientific point of view in dealing with social phenomena.

### **2208-121-Family**

**3 hrs. cr.**

Development of family relationships throughout the life cycle. Attention



## **COURSES OF INSTRUCTION**

is given to courtship and engagement as well as factors promoting satisfactory family relationships.

### **2208-152—Introduction to Anthropology** 3 hrs. cr.

Attention is given to both physical and cultural anthropology. There are comparisons between "preliterate" and "literate" cultures.

### **2208-202—Social Work** 2 hrs. cr.

The historical development, philosophy, and theory forming the basis for professional practice of social work; personal and educational requirements for career opportunities. Prerequisite: Soc 110.

### **3308-212—Social Problems** 3 hrs. cr.

Study of "problem areas" and "social issues" in modern society. Considers personality adjustment, strains, family problems, population problems, forms of deviancy, and group conflict in a stimulated laboratory atmosphere. The latter part of the course explores "solutions" and social engineering programs. Prerequisite: Soc 110.

### **2208-301—Sociology of Religion** 3 hrs. cr.

Study of religion as a social institution. Comparative religions considered briefly. Major attention is given to the relationship of religion to other social institutions in contemporary society. Prerequisite: 6 hours of sociology.

### **2208-311—Social Stratification** 3 hrs. cr.

Analysis of the sociological processes in relation to social situations and interpersonal behavior. Study of factors which account for differences in influence, power, and social prestige. Prerequisite: Soc 110 or permission of the instructor.

### **2208-321—Social Institutions** 3 hrs. cr.

An analysis of the basic social institutions of human society; comparing and contrasting the structure and form among the various cultures, emphasizing interdependence and effect upon human behavior. Prerequisite: 6 hours of sociology.

### **2208-322—Criminology** 3 hrs. cr.

Examines the social-cultural concepts of crime and the theories, agencies and institutions which deal with offenders. Particular attention is given to treatment of the offender, the causation of criminal and anti-social behavior, as well as to programs of crime prevention. Prerequisite: Soc 110 and Soc 212 or permission of the instructor.

### **2208-341—Social Psychology** 3 hrs. cr. (See Psy 341)

### **2208-351—Minority Groups and Race Relations** 3 hrs. cr.

An examination of racial and cultural minorities in contemporary



## **SOCIOLOGY**

American society with special attention given to an analysis of prejudice and discrimination. Prerequisite: Soc 110.

### **2208-352—Group Dynamics**

**3 hrs. cr.**

A study of the processes underlying group interaction and action emphasizing the importance of leadership and communication in social organization. Prerequisite: Soc 110.

### **2208-361—Populations Problems**

**3 hrs. cr.**

The changes in population are stressed through an analysis of birth rates, death rates, and migrations. Demographic and exological factors are stressed in relation to social stratification, ethnic and minority groups, and cultural settings. Prerequisite: 6 hours of sociology.

### **2208-362—Social Pathology**

**3 hrs. cr.**

Problems of social disorganization and deviant behavior in industrial societies. Deals with such topics as dilemmas of work and leisure, problems of conformity and dissent, the clash of popular myths and social realities, mental illness, alcoholic and narcotic addictions, sexual deviation, suicide, bohemianism, youth protests, alienation, anxiety, and anomie; the ambiguity of "normality."

### **2208-402—The Community—Rural and Urban**

**3 hrs. cr.**

Survey of the operation of social processes in groups which share common bonds of territory and cultural interests. Limited attention to the international community. Major attention to the American scene, including the regional, rural, urban, ethnic, and status communities. Prerequisite: 9 hours of sociology.

### **2208-412—Juvenile Delinquency**

**3 hrs. cr.**

Consideration is given to environment and social background for the study of juvenile delinquency. Emphasis is placed upon factors of causation as revealed through personal, family and community situations conditioning delinquent behavior; analysis of concrete cases of juvenile delinquency; and examinations of current methods of dealing with juvenile offenders and programs for the prevention of delinquency. Prerequisite: Soc 110, Soc 322.

### **2208-421—Sociological Theory**

**3 hrs. cr.**

Classical and contemporary social philosophy related to the current theoretical and applied systems of sociology. A study of social thought from Comte to Parsons, utilizing interpretation and evaluation of these philosophies as they relate to the present social conditions. Prerequisite: 9 hours of sociology.

### **2208-432—Sociological Investigations**

**3 hrs. c.**

Group and individual research in the scientific and methodological applications of sociology through quantitative and qualitative techniques of obtaining social data. Critical evaluation of the designs and methods used in sociological research and fieldwork. Prerequisite: 12 hours of sociology.

## COURSES OF INSTRUCTION

### 2208-441—Collective Behavior

3 hrs. cr.

A study of the behavior of people in large groups; collective interstimulation and emotions, crowds, audiences, and publics; mass stimuli and mass response.

### 2208-499—Independent Study

1-3 hrs. cr.

Intensive readings in selected areas of Sociology. Prerequisite: Advanced standing in the major field with a grade point average of 3.0. Registration in the course must be approved by advisor, department head and division chairmen.

## SPEECH AND DRAMA

### Division of Arts and Sciences

Brietzke, Bowman, Hunt, Rhodes

A major for the Bachelor of Arts degree consists of 40 semester hours. The student may select a major emphasis in drama or speech. Required courses for a major emphasis in drama are theatre lab 4 hours, Dr 331, 332, Dr 341, Dr 351, Dr 362, Dr 372, Dr 422, Dr 431, Dr 441, Sp 101, Sp 212, Sp 411. 211 or 498

Required courses for a major emphasis in speech are Sp 101, Sp 102, Sp Cor 131, Sp 211, Sp 212, Sp 300, Sp 301, Sp 311, Sp 411, Forensics Workshop 4 hours, Dr 331, Dr 332, Dr 351.

A major emphasis in speech and drama in the Bachelor of Science in Education curriculum, one of two teaching fields (Plan A) consists of 30 semester hours of speech and drama. Either drama or speech may be emphasized. Required courses for a major emphasis in drama are theatre lab 3 hours, Dr 331-332, Dr 341, Dr 351, Dr 362, Dr 372, Dr 441, Sp 212, Sp 411.

Required courses for a major emphasis in speech are Sp 101, Sp 102, Sp 211, Sp 301, Sp 311, Sp 411, Forensics Workshop 3 hours, Dr 331-322, Dr 351. See education section for teacher education requirements (page 97).

A major in speech and drama as one teaching field (Plan B) includes 37 semester hours. Required courses with an emphasis in drama are theatre lab 4 hours, Dr 331-332, Dr 341, Dr 351, Dr 362, Dr 372, Dr 431, Dr 441, Sp 212, Sp 300, Sp 411.

Required courses with an emphasis in Speech are Sp 101, Sp 102, Sp 211, Sp 300, Sp 301, Sp 311, Sp 411, Forensics Workshop 4 hours, Dr 331-332, Dr 351, Sp Cor 131.

## DRAMA

### 1007-Dr 101, 102, 201, 202, 301, 301, 401, 402—

#### Dramatic Performance

1 hr. cr.

The performance of a major role in a dramatic production. A student may accumulate up to 3 hours of credit. Credit is applied after departmental evaluation and approval at the end of each semester.

### 1007-110—Theatre Appreciation

3 hrs. cr.

Survey of contributions to dramatic production of all ages by



## SPEECH AND DRAMA

playwrights, directors, designers. Appreciation of dramatic form and style. A humanities course for the non-drama major

**1007-121, 122, 221, 222, 321, 322—Theatre Laboratory** [per sem] 1 hr. cr.

A laboratory and, whenever possible, lecture course devoted to the mounting of major productions.

**1007-201—Summer Theatre Production** 6 hrs. cr.

Includes active participation in the summer theatre presentations. Special instruction in voice and diction, movement, acting, and basic stagecraft.

**1007-331, 332—Development of the Drama** [per sem.] 3 hrs. cr.

(331) History and study of the development of theatre and theatre arts; forms, style, and structure of drama from the Greeks to the Elizabethan era; (332) Jacobean to contemporary American theatre.

**1007-341—Beginning Acting** 3 hrs. cr.

A basic performance and theory course, analysis and creation of a role; stage movement and pantomime; basic stage techniques. Problems in stage speech and dialects for the stage.

**1007-351—Play Production** 3 hrs. cr.

Techniques and problems of mounting a play. Includes a basic analysis of the construction of the drama, along with basic elements of costume, stagecraft, and make-up.

**1007-362—Stage Costume and Design** 3 hrs. cr.

Survey of available materials, period costume, and practical experience in the rendering of costume designs to actual stage costumes.

**1007-372—Directing for the stage** 3 hrs. cr.

Study of the skill and role of the director, script analysis, casting, production administration, and director-actor relationships. Each student enrolled will have a directing project or will assist the staff as student director for a major production.

**1007-422—Styles in Acting and Interpretation** 3 hrs. cr.

Lecture and laboratory study of physical manners, posture, movement, rhythm, gestures, and vocal qualities in relation to various periods of theatre presentation. Prerequisite: Dr 341.

**1087-431—Creative Dramatics** 3 hrs. cr.

A study of drama for children with emphasis upon the awakening of the creative imagination through various types of literature.

**1007-442—Stage Design** 3 hrs. cr.

Principles and history of scenic design, sketching, rendering, scene painting techniques. Study of set design related to various styles of drama. Stage lighting approached from practical and aesthetic values.

## **COURSES OF INSTRUCTION**

### **1007-499—Independent Study in Drama**

**1-3 hrs. cr.**

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field with a grade point average of 3.0. Registration in the course must be approved by adviser and department head.

## **SPEECH**

### **1506-100—Speech Techniques**

**3 hrs. cr.**

A practical course designed to improve or to develop self-expression. Emphasis is placed on development of principles of effective oral communication.

### **1506-101—Argumentation and Debate**

**3 hrs. cr.**

A study of the modern forms of evidence, evaluation, and argument, and of methods of refutation and ethical relationships of these methods in a free society.

### **1506-102—Public Speaking**

**3 hrs. cr.**

Practice in preparation and delivery of impromptu and extemporaneous speeches. Prerequisite: Sp 100.

### **1506-121, 122, 221, 222, 321, 322, 421, 422—**

#### **Forensics Workshop**

**[per sem.] 1 hr. cr.**

A practicum in the area of forensics, including research, organization, and presentation of the current debate proposition along with the development and presentation of individual events.

### **1506-211—Discussion Techniques**

**3 hrs. cr.**

Studies in the field of group discussion designed to point out the different types of discussion through participation.

### **1506-212—Oral Interpretation**

**3 hrs. cr.**

Study and application of principles and techniques of oral reading. Includes analysis of different types of literature with emphasis upon platform presentation of prose and poetry.

### **1506-300—Speech Composition**

**3 hrs. cr.**

The study and practice of organization, composition, delivery, and analysis of speeches for individual enrichment.

### **1506-302—Business and Professional Speech**

**3 hrs. cr.**

A practical course designed to meet the speaking needs of business and professional people.

### **1506-311—History and Criticism of Modern Public Address**

**3 hrs. cr.**

A critical study of speakers and speeches selected to present the characteristic ideas of leading social and political developments in national and international affairs since 1918. A lecture, reading, and discussion course.



## **SPEECH AND DRAMA**

### **1506-498—Seminar—Studies in Discussion**

**3 hrs. cr.**

Studies in group thinking and group reaction with a view to improving discussion and conference techniques in the classroom, business and professional situations.

### **1506-499—Independent Study**

**1-3 hrs. cr.**

Study in a selected specialized phase of speech. Prerequisite: Permission of instructor and 3.0 grade average.

## **SPEECH CORRECTION**

### **0815-131—Voice and Articulation**

**3 hrs. cr.**

Techniques for improving the speaking voice. Attention to phonetics, articulation, pronunciation, and general expression.

### **0815-371—Introduction to Speech Science**

A study of the anatomy, psychology, and physics of speech including the examination of key research on the scientific bases of speech, and the theories and controversial concepts for personal identity, and for social control. Recommended for all students preparing to teach.

### **0815-492—Principles and Techniques of Speech Correction**

**3 hrs. cr.**

A study of the nature, causes, diagnosis and treatment of speech defects of children and adolescents, primarily for the classroom teachers. Recommended for all students preparing to teach in any field.



# Combined/Affiliated Degree Programs

Missouri Southern State College has established several combined degree programs whereby the student completes a structured number of academic hours under the regulations established by the College and combines with this the satisfactory completion of the professional/occupational curriculum from a school with which the College has an agreement. Some of the combined programs lead to a Bachelor's (four-year) degree, while others lead to an Associate (two-year) degree. A description of these programs follows:

## BACCALAUREATE DEGREE PROGRAMS

### [Basic Requirements for All Programs]

1. Complete 94 semester hours at Missouri Southern State College. Transfer credit will be considered, but the last 30 of the 94 required semester hours must be earned at MSSC.
2. The 94 hours must include the completion of the general education requirement plus the specialized courses required by the program in which the student is enrolled.
3. Twenty-five out of the 94 semester hours must be upper division (300 and 400 level courses).
4. All applicable "Requirements for Graduation" as stated in the Missouri Southern State College catalog must be met including the application for degree candidacy, the graduation fee, and the filing of credentials with the Placement Office.
5. A transcript from the institution with which a combined degree agreement is arranged must be provided in order to complete the requirements for a degree.

### Engineering:

A combined degree may be arranged with approved and accredited colleges of engineering when the two institutions agree on a student applicant for the program. The student must complete three semesters at the school of engineering at "C" average or above and be certified eligible to continue in the engineering school. The Dean of the College negotiates the agreements with other institutions.

### Medicine:

The Missouri Southern State College student applying for a combined degree with an approved and accredited school of medicine must normally have a "B" or better grade average to be considered. The Dean of the College will work out a combined degree with the school of medicine if the candidate is accepted for admission into the medical school. The student must complete three semesters in the medical school with a grade average of "C" or above and be certified eligible to continue in the school of medicine.

### Law:

A combined degree may be arranged with approved and accredited colleges of law when the two institutions agree on a student applicant for the



program. The Missouri Southern State College student applying for a combined degree with an approved and accredited school of law must normally have a "B" or better grade average to be considered. The Dean of the College will work out a combined degree with the school of law if the candidate is accepted for admission into the law school. The student must complete three semesters in the law school with a grade of "C" or above and be certified eligible to continue in the school of law.

#### **Medical Technology:**

The Bachelor of Science in Medical Technology, with emphasis in biology and chemistry is granted to students who complete this program of study satisfactorily. The college has agreements with St. John's School of Medical Technology, Joplin; Antaeus Lineal Associates, Fayetteville, Arkansas; Baptist Medical Center, Little Rock, Arkansas, Lester E. Cox Medical Center School of Medical Technology, Springfield, Missouri, and Research Hospital, Kansas City, Missouri. If a student wishes to attend an accredited school of medical technology with which the College has no formal agreement, the Dean of the College can negotiate an agreement for the individual student.

The student makes separate application to the school of medical technology which bases its admission decision on its own academic and personal standards. A person is a member of only one student body at a time. He is eligible for the benefits of the student body of which he is a member, but he does not hold membership in both student bodies simultaneously.

Course requirements, in addition to the general education requirements for the Bachelor of Science degree, are Bio 120, Bio 221, Bio 202, Bio 231, Bio 342, Bio 432, Chem 101, Chem 102, Chem 300, Chem 162, Chem 201, Phy 151, and Phy 152.

#### **Environmental Health Technology:**

The Environmental Health Technology Curriculum for the Bachelor of Science degree is an affiliation program in which students complete the Missouri Southern State College requirements for the combined degree and take the applied course work and special laboratory training at the Water and Wastewater Technical School at Neosho, Missouri. The curriculum is designed so that the student may complete requirements at either school first. Some variation in course requirements at each institution are made in consideration of the background of the student and whether work is completed at the Water and Wastewater Technical School before entering Missouri Southern State College or vice versa. In either case, the student must satisfactorily complete 94 academic hours as indicated above and satisfactorily complete the prescribed 36 week curriculum at the Water and Wastewater Technical School in Neosho, Missouri.

Fees for these programs are the same as fees for any other students at the respective schools. These fees are stated in the current catalogs of each institution.

The student holds membership in only one student body at a time.

The Bachelor of Science degree course requirements, in addition to the



## **COURSES OF INSTRUCTION**

general education requirements, are Bio 110, Bio 120, Bio 211, Bio 312, Bio 314, Bio 431, Bio 442, Chem 101, Chem 102, Chem 162, Chem 201, Chem 300, Acct 101, Econ 201, MM 350 and MM 352.

### **ASSOCIATE OF SCIENCE PROGRAMS**

[Requirements Basic to All Associate of Science Combined Degrees]

1. The completion of 32 academic hours, the last 15 of which must be taken in residence at Missouri Southern State College.
2. The minimum cumulative and major field grade point average must be 2.0 or above.
3. The completion of the general education requirements as outlined in the catalog for the Associate of Science degree.
4. The student must satisfactorily complete the occupational/professional courses of the affiliated occupational or professional school as required in the agreement between the two institutions.
5. All applicable "Requirements for Graduation" as stated in the Missouri Southern State College catalog must be met including the application for degree candidacy, the graduation fee, and the filing of credentials with the Placement Office.
6. A transcript from the institution with which a combined degree agreement is arranged must be provided in order to complete the requirements for a degree.

### **COSMETOLOGY**

#### **Division of Technology**

The Associate of Science in Cosmetology is a combined degree developed to meet current licensure requirements for Missouri and adjacent states, general education requirements of Missouri Southern State College, and provide a background in business management for individuals interested in establishing their own business or obtaining managerial positions.

The specialized cosmetology classes are conducted by an accredited off-campus school of cosmetology. The Cosmetology Accrediting Commission is the accrediting agency in Missouri. Credit for cosmetology courses do not apply to other curricula.

The Associate of Science in Cosmetology requires, in addition to general education courses (see page 66), all courses in cosmetology, GB 101, GB 110, Acct 101, GB 220, Econ 201, MM 350, Psy 221, HPER 160 and Art 132.

In addition to established fees for all college students, special fees of \$120 for the first term and \$70 for each succeeding term, including summer, are required for enrollment in cosmetology courses.

#### **COURSE DESCRIPTIONS**

The following courses are offered in Judy's College of Beauty, Joplin, Missouri and with which school Missouri Southern State College has a combined degree agreement.

**5013-100—Introduction to Cosmetology**

**5 hrs. cr.**

A beginning cosmetology course including orientation, sanitation,



## **COSMETOLOGY**

sterilization, and an introduction to anatomy and physiology as applied to cosmetology. Laboratory work includes demonstrations and practice in shampooing, fingerwaving and shaping, curl construction, cold waving, manicuring, color rinses and vegetable tints, facials, scalp treatments and basic hair cutting. Five hours lecture and 15 hours laboratory per week.

### **5013-110—Theory and Practice of Cosmetology** 5 hrs. cr.

Ethics of cosmetology, salesmanship, and salon management plus applications of trichology, dermatology, onychology, bacteriology, electricity, physiology and anatomy. Laboratory work includes demonstrations and practice in hairstyling, make-up, permanent waving, scalp treatments, hair cutting, tinting and bleaching. Five hours lecture and 15 hours laboratory per week.

### **5013-120—Cosmetology Practice and Procedures** 5 hrs. cr.

Clinical practice in all phases of cosmetology in a salon setting. Special emphasis is given to dispensary work and reception. Students work on patrons. Five hours lecture and 35 hours laboratory per week. Summer course only.

### **5013-200—Advanced Theory and Practice of Cosmetology** 5 hrs. cr.

Study of the chemical and physical changes of the hair, the chemistry of permanent wave lotions and hair straighteners. Clinical practice (salon work; emphasizes permanent hair coloring, electrical scalp treatments and facials, hair shaping and electrical manicuring and pedicuring. Techniques of contest work are introduced. Five hours of lecture and 15 hours of lab per week.

### **5013-210—Wig Training and Cosmetic Application** 5 hrs. cr.

Emphasizes tints, bleaches and dye removers, the reconditioning of damaged hair and care and styling of both synthetic and human hair wigs. Advanced instruction in hair shaping, curl structure, combouts and setting patterns. Continuation of instruction in contest work, high-fashion styling and facial types. Five hours lecture, 15 hours salon work per week.

## **ENVIRONMENTAL HEALTH TECHNOLOGY**

### **Division of Technology**

The Associate of Science degree in Environmental Health Technology is in affiliation with the Water and Wastewater Technical School at Neosho, Missouri. The combination of Missouri Southern requirements that are basic to all combined associate degrees, the specific courses required for the associate degree in Environmental Health Technology, plus the completion of a minimum of 30 weeks of approved study at the Water and Wastewater Technical School will qualify the student for the Associate of Science degree.

The specific courses required at Missouri Southern, in addition to the general education requirements, are Chem 101, Chem 102, Bio 120 and 211



## **COURSES OF INSTRUCTION**

(or Bio 312 and Bio 314 for students completing courses at the Water and Wastewater Technical School prior to attending Missouri Southern State College).

Note that the student may complete the requirements at either school first. He is, however, a member of only one student body at a time.

## **RADIOLOGIC TECHNOLOGY**

### **Division of Technology**

The Associate of Science degree in Radiologic Technology is in affiliation with St. John's School of Radiologic Technology. It combines successfully completed studies at St. John's School, or at other accredited schools of Radiologic Technology with which an agreement is made, and the prescribed academic curriculum at Missouri Southern State College. Upon successful completion of the curriculum, including the three months advanced practicum, the individual is eligible to take the National Registry examinations to become a registered Radiologic Technologist.

The Associate of Science in Radiologic Technology requires, in addition to the general education courses (see page 66), all Radiology courses, Bio 221, Psy 221, and Chem 100. Applicants who have not met the prerequisites for Bio 221 must complete them before being admitted to the program.

In addition to established fees for all college students, special fees of \$100 for the first semester and \$40 for each succeeding term, including summers, are required for enrollment in Radiology courses.

Students who are already registered radiologic technologists may also enter this program.

Credit equal to the credit given at the time radiologic technologists enter Missouri Southern for Radiological courses is granted the individual. A minimum of 30 additional academic semester hours is required. This credit would include the general education requirements for the Associate of Science degree plus a concentration of courses in one of the subject-matter areas of business (Accounting and Secretarial Procedures or Business Management), behavioral sciences, or natural science (concentration in either Biology, Chemistry, or Physics).

Below are the courses taught at St. John's School of Radiologic Technology and which become a part of Missouri Southern State College's Associate of Science degree in Radiologic Technology.

### **COURSE DESCRIPTIONS**

#### **5207-101—Introduction to Radiology**

**3 hrs. cr.**

An overview of the organization, function, supervision, and financing of a radiology department including the relationship with other hospital departments. The course includes a history of x-ray, ethical principles, and legal aspects of technology and elementary radiation protection. Five hours of lecture and five hours of lab per week.



## **RADIOLOGIC TECHNOLOGY**

### **5207-111—Medical Terminology**

**5 hrs. cr.**

Provides a background in the language of medicine, especially as related to radiology, through a comprehensive study of the more common medical roots, prefixes and suffixes. Every attempt is made to relate medical roots to everyday English words. A survey of medical and surgical diseases is included. Five hours of lecture per week.

### **5207-121—Patient Care and Special Procedures in Radiologic Technology**

**3 hrs. cr.**

Routine and special care of the patient. The medical team concept of patient care is stressed. Includes sterile techniques, preparation and use of contrast materials. Five hours of lectures and demonstrations per week.

### **5207-132—Principles of Radiographic Exposure**

**3 hrs. cr.**

The fundamental principles of technique and technique conversion with particular emphasis on the factors that directly and indirectly affect radiographic exposure. Emphasis on dark room chemistry and technique are also included in this course. Five hours of lecture and demonstrations per week.

### **5207-142—Radiographic Positioning I**

**3 hrs. cr.**

Basic radiographic positioning including both standard and specialized positions of the extremities and the spine. Film critique is included. Five hours of lecture and demonstrations and five hours of clinical lab per week.

### **5207-152—Osteology**

**3 hrs. cr.**

The structure and function of the human body with emphasis on organs, osteology, and topographic anatomy. Five hours of lecture and demonstrations per week.

### **5207-160—Film Critique**

**2 hrs. cr.**

Develops a student's ability to evaluate x-ray films as to technical quality and diagnostic interpretation. Five hours of lecture and demonstrations per week. Course meets for 14-week session.

### **5207-170—Radiologic Physics I**

**3 hrs. cr.**

The physics of radiology. The physical principles of x-ray production, radiographic exposure, film density and construction, fluorescent screens, etc. Basic equipment maintenance is included. Course meets for 14-week session. Five hours of lecture and demonstration and five hours of lab per week.

### **5207-180—Practicum in Radiology I**

**5 hrs. cr.**

Designed to develop the knowledge and skills necessary to produce x-ray films with speed and accuracy. Course meets for 14-week session. Twenty-five hours of lab per week.

### **5207-241—Radiographic Positioning II**

**3 hrs. cr.**

An in-depth study of routine and special views of the skull and facial

## **COURSES OF INSTRUCTION**

bones. Film critique is included. Five hours of lecture and demonstrations and five hours of lab per week.

### **5207-271—Radiologic Physics II**

**3 hrs. cr.**

Physical principles of radiation therapy and isotopes. Includes theory, application and basic equipment maintenance. Five hours of lecture and five hours of lab per week.

### **5207-252—Radiographic Positioning III**

**3 hrs. cr.**

Procedures and techniques for examination of various organs, including vascular studies and all special procedures. Includes film critique. Five hours of lecture and demonstrations and five hours of lab per week.

### **5207-282—Practicum in Radiology II**

**3 hrs. cr.**

A continuation of Rad 180. Ten hours of lab per week.

### **5207-290—Practicum in Radiology II**

**5 hrs. cr.**

Intensive clinical experience in regular working conditions under the close supervision of a Radiologist and an experienced radiation therapy technologist. Course meets for a minimum of 14 weeks. Thirty-five hours of lab work.

### **5207-299—Advanced Radiology**

**3 hrs. cr.**

A comprehensive review of the field of Radiologic Technology including innovations, trends and anticipated advancements in the field. Course meets for a minimum of 14 weeks. Five hours of lecture per week.

## **A Combined One-Course Program**

### **AVIATION**

#### **Division of Technology**

This course is offered in affiliation with the Carthage Airways Company of Carthage, Missouri and the Mizzou Aviation Company of Joplin, Missouri.

#### **COURSE DESCRIPTION**

##### **5302-200—Basic Pilot Training**

**5 hrs. cr.**

An integrated course designed to meet ground school and flight training requirements for eligibility to take Federal Aviation Administration examination for a Private Pilot Certificate. In addition to scheduled ground school classes, course requires approximately 40 hours of dual and solo flight and check flight. Credit awarded when FAA certificate is obtained. Special fees and third class medical certificate required. Special fees for this course are \$677 which includes plane rental and examiner's test fee. Course grade is recorded as Pass or Fail.



# PRE-PROFESSIONAL AND TECHNOLOGY CURRICULA

## Pre-Professional [Associate of Arts Degree]

The Junior College transfer curricula are designed for students who desire later to work for a baccalaureate degree at Missouri Southern State College, or to transfer to other baccalaureate degree granting institutions. It should be clearly understood by the student that all such institutions have their own entrance requirements, and any student interested in such prospective transfer should consult the latest catalogues of those colleges. The curricula set forth in this section under various headings are ordinarily sufficient to satisfy requirements of other colleges and universities.

Students beginning their education at Missouri Southern State College with the intention of earning a baccalaureate degree should study the general education and major requirements for that degree.

The following programs for students planning to enter the fields of Agriculture, Dentistry, Engineering, Journalism, Medicine, Optometry, and Pharmacy lead to the Associate of Arts degree and are normally transferable to other institutions. Each takes two years and 62 or more semester hours to complete. Programs applicable to other fields may be planned in accord with the criteria stated on page 154. The curricula requirements are:

1. Agriculture.
  - a. General Education (see page 64).
  - b. Five semester hours each in chemistry, botany or zoology, and economics.
  - c. Three semester hours each in algebra, accounting, psychology (general), and sociology.
  - d. Ten hours of electives, selected according to transfer needs.
  - e. All courses must be approved by the adviser.
2. Dentistry.
  - a. General Education (see page 64).
  - b. Eight hours of chemistry, five of zoology, five of microbiology, and eight of physics.
  - c. Six hours of electives, selected according to transfer needs.
3. Engineering.

The student entering pre-engineering must present four high school units in mathematics and one unit in a laboratory science.

- a. General Education (see page 64).
- b. Mathematics 150, 250 and 260. (15 hrs.)
- c. Chemistry 101 and 102 (8 hrs.)
- d. Drafting 110 and 120\* (6 hrs.)
- e. Physics 250 and 260 (10 hrs.)
- f. Electives (4 hrs.)

\*Drafting 120, Descriptive Geometry, is not required for chemical or electrical engineers.

## COURSES OF INSTRUCTION

### 4. Journalism.

The student planning to enter a journalism school must complete 60 credit hours in Arts and Science, including the following specific requirements:

- a. General Education (see page 64).
  - b. One foreign language (13 hrs.)
  - c. Economics (3 hrs.)
  - d. U.S. Government (3 hrs.)
  - e. English Literature (6 hrs.)
  - f. Electives should be chosen from sociology, psychology, philosophy, mathematics, accounting, English and journalism. (8 hrs.)
5. Medicine.
- a. General Education (see page 64).
  - b. One foreign language (10 hrs.)
  - c. Chemistry, qualitative analysis (11 hrs.)
  - d. Zoology (10 hrs.)
  - e. Physics (8 hrs.)
6. Optometry.
- a. General Education (see page 64).
  - b. English literature (3 hrs.)
  - c. Algebra and trigonometry (5 hrs.)
  - d. Zoology (5 hrs.)
  - e. Chemistry (8 hrs.)
  - f. Physics (8 hrs.)
  - g. General psychology (3 hrs.)
  - h. Electives, according to transfer needs (5 hrs.)
7. Pharmacy.
- a. General Education (see page 64).
  - b. Algebra and trigonometry (5 hrs.)
  - c. Zoology and botany (10 hrs.)
  - d. General chemistry (8 hrs.)
  - e. Physics (8 hrs.)
  - f. Accounting (3 hrs.)
  - g. Qualitative and quantitative analysis (8 hrs.)

## TECHNOLOGY

[Associate of Science Degree]

The courses of study leading to the Associate of Science degree in Automotive Technology, Computer Science, Cosmetology, Drafting and Design, Law Enforcement, Machine Technology, Nursing and Radiologic Technology are described in the "Curriculum" section of this catalog under their respective headings (see pages 77, 89, 91, 116, 118, 129, 156, 158).



## TECHNOLOGY

The Suggested Orders of Study for these programs are found on pages 165-199 immediately following this section.

Additional two-year programs leading to the Associate of Science degree are available in Accounting, General Business, and Secretarial Science.

### 1. Accounting.

The curriculum prepares students to enter public accounting firms, industry, banking and government service as accounting assistants or accounting clerks. The degree requires completion of:

- a. General education (see page 66).
- b. Acct 101, 102, Acct 211, Acct 212, Acct 401, Econ 201, 202, GB 101, GB 121, GB 301, MM 350, and OA 102 or OA 200.
- c. Five hours of electives which should be selected from business law, auditing, statistics, or mathematics.

### 2. General Business.

In this program the student prepares for supervisory and managerial positions, or for operating a private business. It provides the fundamental knowledge of marketing and management required for effective business operations. Practical techniques, skills of communication, and good human relations are developed. The degree requires completion of:

- a. General education (see page 66).
- b. Acct 101, 102, Econ 201, 202, GB 101, GB 301, 302, MM 300, MM 350.
- c. Fourteen credit hours of electives selected from the business areas of personnel management, advertising, retailing, salesmanship, and business communications. Selections from psychology are also valid.

### 3. Secretarial Science.

The secretarial science program helps prepare the student for the professional secretary position. The degree requires completion of:

- a. General education (see page 66).
- b. Acct 101, GB 101, GB 301, OA 200, OA 220, and OA 230.
- c. Electives may include prerequisite courses to OA 200 and OA 220 if needed. Others should be selected from business organization and management, accounting, economics, geography, business communications, general psychology, and office machines.

## Certificate of Achievement:

### Secretarial-Typist.

A one-year secretarial certificate program that provides students with training essential to obtaining employment as a secretarial-typist. Successful completion of the required curriculum qualifies the student to a Certificate of Achievement.

The certificate requires the completion of: Acct 101, Eng 101, GB 101, GB 110, GB 121, GB 220, OA 200, OA 210, OA220, and Speech 100.

# THE DIVISION OF CONTINUING EDUCATION

The Division of Continuing Education is administered by the Office of the Dean of the College. It is designed to offer credit and non-credit courses that are not in the regular curriculum, but which will meet community and societal needs. The courses to be offered will be determined by the Dean of the College after consulting with community leaders and college personnel. Business, industry, and civic leaders are requested to make known the educational needs of their areas. The College will do its best to help meet those needs.

The Division of Continuing Education must be self-supporting in terms of instructional costs. A fee of \$29 will be charged for each credit hour. A minimum of 20 students will be required for a class to be organized and taught.

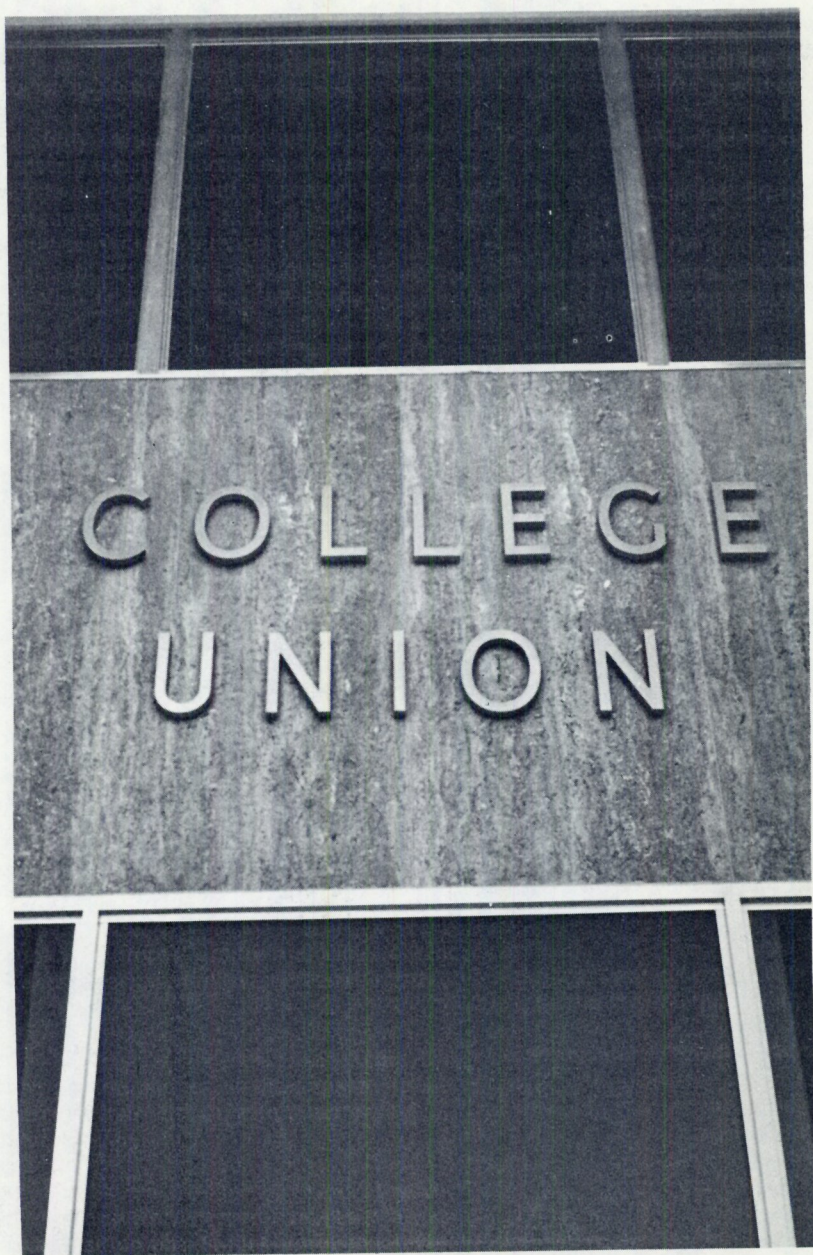
Non-credit courses will also be offered upon demand. The charges for these courses will be appropriate to the length of time they run and to the cost of instruction. The details for each course will be made public in order that persons wanting to take it will know exactly what the cost and the time-demand will be.

Courses offered in the Continuing Education Division normally will not count toward an associate or baccalaureate degree.

Registration for each course will be required and a permanent record of all work attempted and completed will be kept. Students will be able to ask for and receive transcripts of their records.









## SUGGESTED ORDER OF STUDY

### SUGGESTED ORDERS OF STUDY

Below are suggested orders of study for some of the college degree offerings. The four-year, baccalaureate programs are listed first. These are followed by the two-year, associate degree programs.

#### BACCALAUREATE PROGRAMS

##### Suggested Order of Study BACHELOR OF ARTS ENGLISH MAJOR

###### 1st Semester

###### 2nd Semester

#### FRESHMAN

Course	Hours	Course	Hours
*Eng 101 Composition	3	Eng 102 Composition	3
History 110 or 120	3	Foreign Language	5
Foreign Language	5	Psc 120	3
Math 110 or 130	3	HPER 102	1
HPER 101	1	English Elective	3
Orientation	<u>1</u>		<u>15</u>
	16		

\* Students who qualify take English III instead of English 101-102

#### SOPHOMORE

Biological Science	5	Physical Science	5
Eng 210	3	Eng 220	3
HPER 160	2	Eng 216 or 315	3
Speech 100 or 102	3	Psychology 100	3
English Elective	3	Social Science Elective	3
	<u>3</u>		<u>3</u>
	16		17

#### JUNIOR

Eng 311	3	Eng 312	3
Eng 301 or 310	3	English Elective	3
Eng Elective	3	Fine Arts Elective	3
Electives	6	Elective	6
	<u>6</u>		<u>6</u>
	15		15

#### SENIOR

English Electives	6	English Electives	6
Electives	9	Electives	9
	<u>9</u>		<u>9</u>
	15		15

# SUGGESTED ORDER OF STUDY

## BACHELOR OF ARTS PSYCHOLOGY MAJOR

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Math 140 College Algebra & Trigonometry	5	Hist 120 U.S. History 1877 to the Present	3
Psy 110 Psychology of Human Development	5	Bio 120 General Zoology	5
HPER 101 Introduction to Physical Activities I	1	Psy Elective	3
Psy 120 Freshman Orientation	1	HPER 102 Introduction to Physical Activities II	1
	<u>15</u>		<u>15</u>

## SOPHOMORE

Psy 311 Statistics	3	Psy 312 Experimental Psychology	5
Bio 221 Human Anatomy and Physiology	5	Chem 101 Chemistry or Psychology 151	5
Eng 120 or 130 World Literature	3	Eng 210 or 220 English Literature	3
HPER 160 Personal Health	2	Spch 100 Speech Techniques or Speech 202	3
Soc 110 General Sociology or Geology 211 or Economics 201	3		<u>16</u>
	<u>16</u>		

## JUNIOR

Foreign Language	5	Foreign Language	5
Bio 331 Comparative Chordate	5	Psy 422 Theories of Personality	3
Psy 451 Psychology of Learning	3	PSc 120 Government: National, State, Local	3
Comp 100 Basic Computing Machines	3	Art 110 Introduction to Contemporary Art or Dr 110 Music 110 or Phil 201	3
	<u>16</u>	Psy 412 Meas and Eval	3
			<u>17</u>

## SENIOR

Psy 411 Sensation and Perception	3	Psy 442 Physiological Psychology	3
Psy 480 Seminar	3	Psy 452 History and Systems of Psychology	3
Psy 490 Independent Study	1-3	Psy Electives	3
Psy Elective (Upper Division)	3	Electives (Upper Division)	
Electives (Upper Division)	4-6		<u>16</u>
	<u>16</u>		

### One of the Support Areas Below [Major hours only acceptable]

Biology and/or Chemistry	15	Math and/or Comp. Science	15
Biology and/or Physics	15	Sociology and/or Anthropology	15
Chemistry/or Physics	15	Marketing and Management	15

### Psychology Electives:

Psy 200 Child Psychology and Development	Psy 412 Measurement and Evaluation in Education and Psychology
Psy 210 Adolescent Psychology	Psy 422 Theories of Personality
Psy 221 Psychology of Personal Adjustment	Psy 432 Abnormal Psychology
Psy 302 The Exceptional Child	Psy 471 Group and Individual Intelligence Testing
Psy 310 Educational Psychology	Psy 480 Seminar in Psychology
Psy 341 Social Psychology	Psy 490 Independent Study



SUGGESTED ORDER OF STUDY  
**BACHELOR OF ARTS**  
**SPEECH AND DRAMA MAJOR**  
**Drama Emphasis**

**1st Semester**

Course
Eng 101 Composition
His 110 U.S. History 1492-1877
or
His 120 U.S. History 1877-Present
Spch 100 Speech Techniques
Dr 110 Theatre Appreciation
Eng 120-130 World Masterpieces
Psy 120 Orientation

**FRESHMAN**

Hours	Course	Hours
3	Eng 102 Composition	3
3	Bio 100 General Biology	5
	HPER 102 Introduction to Physical Activities II	1
3	Dr 122 Theatre Lab	1
3	PSc 120 Government: National, State, Local	3
3	Psy 100 General Psychology	3
<u>1</u>		<u>3</u>
16		16

**2nd Semester**

**SOPHOMORE**

Math 110 Intro. to Col. Math I	3	Phy 100 Introduction to Physical Science	5
or		Sp 102 Beginning Spanish	5
Math 130 College Algebra		or	
Eng 120-130 World Masterpieces	3	Fr 102 Beginning French	
Sp 101 Beginning Spanish	5	or	
or		Ger 102 Beginning German	
Fr 101 Beginning French		Spch 212 Oral Interpretation	3
or		Dr 222 Theatre Lab	1
Ger 101 Beginning German		HPER 160 Personal Health	2
Dr 221 Theatre Lab	1		<u>16</u>
HPER 101 Introduction to Physical Activities I	1		
Spch 101 Argumentation and Debate	3		
	<u>16</u>		

**JUNIOR**

Dr 121 Theatre Lab	1	Dr 332 Development of Drama	3
His 200 Western Civilization-1500	3	Dr 362 Costume	3
Dr 331 Development of Drama	3	Dr 372 Directing	3
Dr 351 Play Production	3	Electives	5
Dr 341 Beginning Acting	3		<u>14</u>
Art 100 (Elect) Art Composition	3		
	<u>16</u>		

**SENIOR**

Spch 411 Seminar	3	Art 302 Art History (elect)	3
Dr 431 Creative Dramatics	3	Spch 492 (elect) Speech Correction	3
Art 301 Art History (elect)	3	Dr 422 Styles	3
Dr 441 Scene Design	3	Electives	6
Elective	3		<u>15</u>
	<u>15</u>	(Recommended in Lit. 1 hr. must be in upper division)	

# SUGGESTED ORDER OF STUDY

## BACHELOR OF ARTS SPEECH AND DRAMA MAJOR Speech Emphasis

### 1st Semester

Course	Hours
Eng 101 Composition	3
Spch 101 Argumentation and Debate	3
His 110 U.S. History 1492-1877 or	3
His 120 U.S. History 1877-Present	1
Spch 121 Forensic Workshop	3
Eng 120-130 World Masterpieces	3
Dr 110 Theatre Appreciation	3
Psy 120 Orientation	1
	17

### 2nd Semester

#### FRESHMAN

Course	Hours
Eng 102 Composition	3
Bio 100 General Biology	5
Spch 100 Speech Techniques	3
Spch 122 Forensics Workshop	1
PSc 120 Government: National, State, Local	3
HPER 101 Introduction to Physical Activities I	1
	16

#### SOPHOMORE

Math 110 Intro. to Coll. Math I. or	3
Math 130 College Algebra	3
Sp 101 Beginning Spanish or	5
Fr 101 Beginning French or	
Ger 101 Beginning German	
Spch 221 Forensics Lab	1
HPER 102 Introduction to Physical Activities II	1
Spch Cor 131 Voice and Articulation	3
Spch 210 Discussion Techniques	3
	16

Phys 100 Introduction to Physical Science	5
Sp 102 Beginning Spanish or	5
Fr 102 Beginning French or	
Ger 102 Beginning German	3
Spch 102 Public Speaking	2
HPER 160 Personal Health	1
Spch 222 Forensic Workshop	1
	16

#### JUNIOR

Dr 331 Development of Drama	3
His 200 Western Civilization-1500	3
Spch 321 (elect) Forensic Workshop	1
Spch 302 Business and Professional Speech	3
Psy 100 General Psychology	3
Electives	3
	16

Spch 212 Oral Interpretation	3
Dr 332 Development of Drama	3
Eng 210-220 English Literature	3
Spch 322 (elect) Forensic Workshop	1
Art 100 (elect) Art Composition	3
Electives	3
	16

#### SENIOR

Spch 311 Public Address	3
Spch 411 Seminar-Studies in Discussion	3
Spch 421 (elect) Forensic Workshop	1
Dr 351 Play Production	3
Electives	5
	15

Spch 300 Speech Composition	3
Spch 422 (elect) Forensic Workshop	1
Electives	11
	15

All electives recommended in art, music, history or literature.



**SUGGESTED ORDER OF STUDY**  
**BACHELOR OF SCIENCE**  
**BIOLOGY MAJOR**

1st Semester		2nd Semester	
FRESHMAN			
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Bio 110 or 120 General Botany or General Zoology	5	Bio 110 or 120 General Botany or General Zoology	5
Psy 120 Freshman Orientation	1	Math 140 College Algebra and Trigonometry	5
General Education	6	General Education	3
	<u>15</u>		<u>16</u>

SOPHOMORE			
Chem 101 General Chemistry I	5	Chem 102 General Chemistry II	3
Bio 202 Genetics	3	Bio 211 Microbiology	5
General Education	7	General Education	8
	<u>15</u>		<u>16</u>

JUNIOR			
Chem 301 Organic Chemistry I	5	Bio Group C Elective	5
Bio Group A Elective	5	Bio 480 Seminar	1
Bio 303 Principles of Taxonomy	1	General Education	3
Elective, Preferably Physics 151	5	Senior Hour Electives, Preferably in Biology or Chemistry	6
	<u>16</u>		<u>15</u>

SENIOR			
Bio Group B Elective	5	Bio Senior Hour Elective	6
Bio Senior Hour Elective	5	Bio Elective	2
General Education	6	General Education	7
Preferably including Geology 110			<u>15</u>
	<u>16</u>		

Note: Some fields of Environmental and Health Sciences have specific requirements.  
Students in Pre-medicine, Pre-dental, Pre-veterinarian, Conservation, etc.

**Suggested Order of Study**  
**BACHELOR OF SCIENCE**  
**BUSINESS ADMINISTRATION MAJOR**  
**Accounting Approach**

1st Semester		2nd Semester	
FRESHMAN			
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Psy 100 General Psychology	3	Hist 110 U.S. History 1492-1877	3
HPER 101 Introduction to Physical Activities I	1	HPER 102 Introduction to Physical Activities II	1
GB 101 Introduction to Business	3	Math 130 College Algebra	3
Acct 101 Elementary Accounting I	3	Acct 102 Elementary Accounting II	3
Psy 120 Freshman Orientation	1	Electives	3
Electives	2		16
	16		

## SUGGESTED ORDER OF STUDY

### SOPHOMORE

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Acct 212 Intermediate Accounting I	3	Acct 301 Intermediate Accounting II	3
Econ 201 Principles of Economics	3	Econ 202 Principles of Economics	3
Bio 100 General Biology	5	Phys 100 Fundamentals of Physical Science	5
Speech 100 Speech Techniques	3	HPER 160 Personal Health	2
PSc 120 Government: National, State, Local	3	GB 220 Business Communications	3
	<u>17</u>		<u>16</u>

### JUNIOR

Acct 211 Cost Accounting	3	Acct 302 Advanced Accounting	3
GB 301 Business Law	3	GB 302 Business Law	3
MM 300 Principles of Marketing	3	GB 321 Business Statistics	3
Econ 300 Money and Banking	3	Econ 350 Corporate Finance	3
Fine Arts	3	Humanities	3
	<u>15</u>		<u>15</u>

### SENIOR

Acct 411 Auditing	3	Elective in Accounting	3
Acct 401 Tax Accounting	3	MM 352 Personnel Management	3
MM 350 Business Organization and Management	3	Electives	9
Humanities	3		<u>15</u>
Electives	3		
	<u>15</u>		

## Suggested Order of Study BACHELOR OF SCIENCE BUSINESS ADMINISTRATION MAJOR General Business Approach

### 1st Semester

### 2nd Semester

### FRESHMAN

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Psy 100 General Psychology	3	Hist 110 U.S. History 1492-1877	3
HPER 101 Intro to Physical Activities I	1	HPER 102 Intro to Physical Activities II	1
*GB 101 Introduction to Business	3	Math 130 College Algebra	3
PSc 120 Government: National, State, Local	3	Spch 100 Speech Techniques	3
Psy 120 Freshman Orientation	1	Humanities	3
Electives	2		<u>16</u>
	<u>16</u>		

### SOPHOMORE

Bio 100 General Biology	5	Phys 100 Fundamentals of Physical Science	5
Humanities	3	*Acct 102 Elementary Accounting II	3
*Acct 101 Elementary Accounting I	3	*Econ 202 Principles of Economics	3
Econ 201 Principles of Economics	3	*GB 220 Business Communications	3
HPER 160 Personal Health or one Activity course	1-2	Electives	3
	<u>15-16</u>		<u>17</u>



# SUGGESTED ORDER OF STUDY

## 1st Semester

## 2nd Semester

### JUNIOR

Course	Hours	Course	Hours
*GB 301 Business Law I	3	*GB 302 Business Law II	3
*GB 321 Statistics	3	*Econ 350 Corporate Finance	3
*MM 300 Principles of Marketing	3	*MM 352 Personnel Management	3
*Econ 300 Money and Banking	3	Humanities	3
*MM 350 Business Organization and Management	3	Electives	3
	<u>15</u>		<u>15</u>

### SENIOR

**Elective in Economics (No. 300 or above)	3	**Elective in Marketing and Management (No. 300 or above)	3
**Elective in Business (No. 300 or above)	3	**Elective in General Business (No. 300 or above)	3
Electives (No. 300 or above)	<u>9</u>	Electives	<u>9</u>
	<u>15</u>		<u>15</u>
*General Requirements in Business			
**Specific Program Requirements in Business			

## Suggested Order of Study BACHELOR OF SCIENCE BUSINESS ADMINISTRATION MAJOR Marketing and Management Approach

## 1st Semester

## 2nd Semester

### FRESHMAN

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Psy 100 General Psychology	3	Hist 110 U.S. History 1492-1877	3
HPER 101 Intro to Physical Activities I	1	HPER 102 Intro to Physical Activities II	1
GB 101 Introduction to Business	3	Math 130 College Algebra or Equivalent	3
PSc 120 Government: National, State, Local	3	Spch 100 Speech Techniques	3
Psy 120 Freshman Orientation	1	Electives	2-3
Electives	<u>2</u>		<u>15-16</u>
	<u>16</u>		

### SOPHOMORE

Bio 100 General Biology	5	Phys 100 Fundamentals of Physical Science	5
Humanities	3	Acct 102 Elementary Accounting II	3
Acct 101 Elementary Accounting I	3	Econ 202 Principals of Economics	3
Econ 201 Principles of Economics	3	GB 220 Business Communications	3
HPER 160 Personal Health	<u>2</u>	Electives	<u>3</u>
	<u>16</u>		<u>17</u>

### JUNIOR

GB 302 Business Law	3	GB 302 Business Law	3
Fine Arts	3	GB 321 Business Statistics	3
MM 330 Principles of Marketing	3	Econ 350 Corporate Finance	3
MM 350 Business Organization and Management	3	MM 352 Personnel Management	3
Econ 300 Money and Banking	<u>3</u>	MM 312 Retailing	<u>3</u>
	<u>15</u>		<u>15</u>

## SUGGESTED ORDER OF STUDY

1st Semester		2nd Semester	
SENIOR			
Course	Hours	Course	Hours
Humanities	3	MM 452 Business Policy	3
MM 401 Advertising	3	Electives in Business or Econ.	6
MM 412 Marketing Management	3	Electives	6
MM 431 Production Management	3		15
Electives	3		
	15		

## Suggested Order of Study BACHELOR OF SCIENCE CHEMISTRY MAJOR

1st Semester		2nd Semester	
FRESHMAN			
Course	Hours	Course	Hours
Chem 101 Gen Chemistry I	5	Chem 102 Gen Chemistry II	3
Math 150 Calculus I	5	Chem 162 Qualitative Analysis	3
Eng 101 Composition	3	Math 250 Calculus II	5
HPER 101 Phys Act I	1	Eng 102 Composition	3
Psy 120 Freshman Orientation	1	HPER 102 Phys. Act. II	1
*Hist 110 U. S. History	3		15
	<u>18</u>		

## SOPHOMORE

Chem 301 Organic Chemistry I	5	Chem 302 Organic Chemistry II	5
Phys 250 Gen. Physics I	5	Phys 260 Gen Physics II	5
Math 260 Calculus III	5	*Bio 100 Gen Biology	5
HPER 106 Personal Health	2	Psy 100 Gen Psychology	3
	17		18

## JUNIOR

Chem 201 Quantitative Analysis	5	Chem 402 Physical Chemistry II	3
Chem 401 Physical Chemistry I	3	**Chem 403 Exp Physical Chemistry	2
*Spch 100 Speech Techniques	3	**Chem 421 Instrumental Analysis	5
*Hist 200 Western Civilization	3	*Eng 210 English Literature	3
*Eng 120 Masterp. of World Literature	3	PSc 120 Government: National, State, Local	3
	17		16

## SENIOR

**Chem 422 Adv Inorganic Chemistry	4	**Chem 472 Organic Qualitative Analysis	3
**Chem 490 Independent Study	1	**Chem 490 Independent Study	2
**Phys 301 Modern Physics	5	**Phys 341 Thermal Physics	4
*Art 110 Introduction to Art	3	Electives (Upper Division)	4
Elective	2		13
	15		

- \*Alternate course(s) will satisfy requirement.  
 \*\*Suggested electives (not strict requirements)



**SUGGESTED ORDER OF STUDY**  
**BACHELOR OF SCIENCE**  
**ENVIRONMENTAL HEALTH TECHNOLOGY MAJOR**  
**1st Semester** **2nd Semester**

**FRESHMAN**

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Math 140 Algebra & Trigonometry	5	Hist 110 United States History	3
Bio 120 General Zoology	5	Bio 110 General Botany	5
Psy 100 General Psychology	3	Art 110 Introduction to Art	3
Psy 120 Orientation	1	HPER 102 Physical Education	1
HPER 101 Physical Education	1	HPER 100 Personal Health	2
	<u>18</u>		<u>17</u>

**SOPHOMORE**

Chem 101 General Chemistry	5	Chem 102 General Chemistry	3
Eng 120 Masterpieces of World Literature	3	Chem 162 Qualitative Analysis	3
Econ 201 Principles of Economics	3	Bio 211 Microbiology	5
Spch 100 Speech Techniques	3	Eng 210 English Literature	3
Acct 101 Elementary Accounting	3	MM Business Organization and Management	3
	<u>17</u>		<u>17</u>

**JUNIOR**

Chem 201 Quantatative Analysis	5	Chem 300 Organic & Biological Chemistry	5
Bio 431 Animal Physiology	5	Bio 442 Invertebrate Zoology	5
Bio 312 Environmental Biology	3	PSc 120 Government: National, State, Local	3
Bio 314 Environmental Biology Lab	2	MM 352 Personnel Management	3
	<u>15</u>		<u>16</u>

**SENIOR**

The fourth year consists of a minimum of 36 weeks of study at the Water and Wastewater School. (This work may be taken prior to entering MSSC.)

**Suggested Order of Study**  
**BACHELOR OF SCIENCE**  
**MATHEMATICS MAJOR**  
**[Freshman Year Only]**

**1st Semester**

**2nd Semester**

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Math 150 Calculus with Analytic Geometry I	5	Math 250 Calculus with Analytic Geometry II	5
Chem 101 General Chemistry I (General Education Course)	2	Chem 102 General Chemistry II (General Education Course)	3
HPER 151 Foundations of Physical Activities I	1	HPER 152 Foundations of Physical Activities II	1
Psy 120 Freshman Orientation	1	Math 271 Selected Topics in Mathematics	2
	<u>17</u>		<u>17</u>

## SUGGESTED ORDER OF STUDY

### BACHELOR OF SCIENCE MEDICAL TECHNOLOGY MAJOR

#### FRESHMAN

Course	Hours	Course	Hours
Math 100 Slide Rule	1	Eng 102 Composition	3
Eng 101 Composition	3	Bio 120 General Zoology	5
Chem 101 General Chemistry I	5	Chem 102 General Chemistry II	3
Math 140 Algebra and Trigonometry	5	Hist 110 U.S. History	3
Psy 120 Freshman Orientation	1	HPER 102 Introduction to	
HPER 101 Introduction to		Physical Activities II	1
Physical Activities I	1		15
	<u>16</u>		

#### SOPHOMORE

Eng 120 Masterpieces of World Literature	3	Eng 210 English Literature	3
Psy 100 General Psychology	3	Speech 100 Speech Techniques	3
Chem 300 Organic and Biological Chemistry	5	Chem 162 Qualitative Analysis	3
Bio 221 Human Anatomy and Physiology	5	Soc 110 Introduction to Sociology	3
	<u>16</u>	Bio 202 Genetics	3
			15

#### JUNIOR

Art 110 Introduction to Art	3	PSc 120 Government: National, State, Local	3
Chem 201 Quantitative Analysis	5	Phy 152 Elementary College Physics II	3
Bio 231 Fundamentals of		Bio 432 Histology	3
Medical Microbiology	5	Bio 342 Microtechnique	2
Phy 151 Elementary College Physics I	5	HPER 160 Personal Health	2
	<u>18</u>	Elective	3
			16

#### SENIOR

The fourth year consists of twelve months of study at an accredited school of medical Technology (see page 155).

### Suggested Order of Study BACHELOR OF SCIENCE PHYSICS MAJOR

Physics students who plan to do graduate work in engineering should include Chem 101, Chem 102, Comp 120, Comp 130, Draf 110 and Draf 120 in their program as well as the following special courses: **Chemical Engineering**—Chem 201, Chem 301, Chem 302, Chem 401, Chem 402, and Chem 421; **Electrical Engineering**—Math 351, Math 412, Math 431, and Phys 480 (circuit analysis); **Engineering Mechanics**—Math 260, Math 351, Math 412, Math 431 and Phys 480 (fluid mechanics and heat transfer); **Mechanical Engineering**—Draf 130, Phys 480 (fluid mechanics and heat transfer) plus additional courses in machines.



# SUGGESTED ORDER OF STUDY

## 1st Semester

## 2nd Semester

### FRESHMAN

Course	Hours	Course	Hours
Math 150 Calculus and Analytic Geometry I	5	Phys 250 General Physics I	5
*Chem 101 General Chemistry I	5	Math 250 Calculus and Analytic Geometry II	5
Eng 101 Composition	3	*Chem 102 General Chemistry II	3
HPER 101 Introduction to Physical Activities I	1	Eng 102 Composition	3
Area II General	3	HPER 102 Introduction to Physical Activities II	1
	<u>17</u>		<u>17</u>

### SOPHOMORE

Phys 260 General Physics II	5	Phys 301 Modern Physics	4
Math 260 Calculus and Analytic Geometry III	5	Phys 372 Electronic Circuits	4
Psy 100 General Psychology	3	Math 322 Differential Equations	3
HPER 160 Personal Health	2	Electives	5
	<u>15</u>		<u>16</u>

### JUNIOR

Phys 381 Intermediate Physics Laboratory or Phys 322 Classical Mechanics	3	*Math 152 Introduction to Programming	2
Phys 341 Thermal Physics or Phys 401 Electricity and Magnetism	4	Phys 452 Quantum Mechanics or elective	3
Eng 120 or 130 World Literature	3	Spch 100 Speech Techniques	3
Hist 110 U.S. History 1492-1877 or Hist 120 U.S. History 1877 to the Present	3	PSc 120 Government: National, State, Local	3
*Math 412 Vector Analysis	3	Bio 100 General Biology	5
	<u>16</u>		<u>16</u>

### SENIOR

*Math 431 Numerical Analysis	3	Phys 452 Quantum Mechanics or elective	3
Phys 341 Thermal Physics or Phys 401 Electricity and Magnetism	4	Eng 210 or 220 English Literature	3
Phys 381 Intermediate Physics Laboratory or Phys 322 Classical Mechanics	3	Area III General Education	3
Electives	6	Electives	6
	<u>16</u>		<u>15</u>

\*Recommended but not required.

## Suggested Order of Study BACHELOR OF SCIENCE IN EDUCATION BUSINESS MAJOR

### Option B—Single Teaching Field

## 1st Semester

## 2nd Semester

### FRESHMAN

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Hist 110 U.S. History 1492-1877	3	PSc 120 Government: National, State, Local	3
Humanities	3	Speech 100 Speech Techniques	3
Psy 110 Psy of Human Development	5	Humanities	3
HPER 101 Introduction to Physical Activities I	1	HPER 102 Introduction to Physical Activities II	1
Psy 120 Freshman Orientation	1	Math 110 Introduction to College Mathematics or Math 130 College Algebra	3
	<u>16</u>		<u>16</u>

# SUGGESTED ORDER OF STUDY

1st Semester		2nd Semester	
SOPHOMORE			
Course	Hours	Course	Hours
Phys 100 Fundamentals of Physical Science	5	Bio 100 General Biology	5
Humanities	3	Econ 202 Principles of Economics	3
HPER 160 Personal Health	2	GB 121 Office Machines	3
Econ 201 Principles of Economics	3	Acct 102 Elementary Accounting II	3
Acct 101 Elementary Accounting I	3	Comp 100 Basic Computing Machines	3
Educ 200 Expl. Field Exp.	1		17
	17		
JUNIOR			
Acct 212 Intermediate Accounting or Acct 211		GB 302 Business Law	3
Cost Accounting, or Acct 401		GB 220 Business Communications	3
Tax Accounting	3	Psy 310 Educational Psychology	3
GB301 Business Law	3	OA Typewriting	3
OA Shorthand or a business elective	3	OA Shorthand or a business elective	3
MM 350 Business Organization and Management	3		15
One activity course if needed	1		
OA Typewriting	3		
	16		
SENIOR			
Educ 330 Structure of Teaching—Secondary	2	Professional semester	16
Business electives (No. 300 or above	12		
Educ 331 Video Teach Lab	1		
	15		

## Suggested Order of Study BACHELOR OF SCIENCE IN EDUCATION ELEMENTARY EDUCATION MAJOR

1st Semester		2nd Semester	
FRESHMAN			
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Psy 110 Human Development	5	Hist 120 U.S. History 1877 to the Present	3
Hist 110 U.S. History 1492-1877	3	Art 110 Introduction to Contemporary Art or Music 110 or Dr. 110	3
Math 110 Introduction to College Mathematics I	3	Math 120 Introduction to College Mathematics II	3
HPER 101 Introduction to Physical Activities I	1	HPER 102 Introduction to Physical Activities II	1
Psy 120 Freshman Orientation	<u>1</u>	PSc 120 Government: National, State, Local	<u>3</u>
	16		16
SOPHOMORE			
Eng 120 or 130 World Literature	3	Psy 310 Educational Psychology	3
Phys 100 Introduction to Physical Science	5	Eng 222 Children's Literature	3
Music 262 Music in Elementary School	3	Art 220 Art Education	3
Spch 100 Techniques of Speech	3	Bio 100 General Biology	5
or Spch 211 Discussion Techniques	<u>3</u>	Educ 200 Expl. Field Exp.	1
	17	Electives	2
			17



# SUGGESTED ORDER OF STUDY

## 1st Semester

## 2nd Semester

### JUNIOR

Course	Hours	Course	Hours
Eng 301 Structure of American English or Eng. 315	3	HPER 370 School and Community Health	3
HPER 311 P.E. in Elementary School	2	Educ 312 Problems in Arithmetic	2
Eng 210 or 220 English Literature	3	Educ 340 Lang Art and Reading	5
Educ 320 Structure of Teaching	2	Psy 302 Exceptional Child	2
Educ 321 Video Teach Lab.	1	Electives (on supporting area)	4
Geog 211 or Geog 222	3		16
Hist 201 or 202 European History	3		
	17		

### SENIOR

Educ 311 Science in Elementary School	2	Educ 432 Critical Issues in Education	2
Bio 310 Field Biology	2	Educ 402 History of Education	2
Educ 351 Teaching the Mentally Retarded or Speech 492 (or Education 352)	3	Psy 412 Measurements and Evaluation or Educ 412 Social Foundation of Curriculum Development	2
Educ 492 Remed and Diag Reading	2	Educ 442 Student Teaching Elementary	6
Electives	4	Educ 322 Teach Elementary Soc. Studies	2
Comp 100 Basic Comp Machines	3	Educ 370 Inst. Media	2
	16		16

After the first year the semesters can be interchanged.

\*Students whose last names begin with the letters A-L should plan to student teach during the first semester.

## Suggested Order of Study BACHELOR OF SCIENCE IN EDUCATION ENGLISH MAJOR

### 1st Semester

### 2nd Semester

#### FRESHMAN

Course	Hours	Course	Hours
*Eng 101 Composition	3	English 102 Composition	3
History 110 or 120	3	Physical Science 100	5
Psychology 110	5	English 210	3
Math 110	3	English Elective	3
HPER 101	1	HPER 102	1
Orientation (Psy 120)	1		15
	16		

\*Students who qualify take English III instead of English 101-102.

#### SOPHOMORE

English 220 English Literature	3	English 301 or 310	3
Biological Science	5	English 312	3
English 311	3	Psychology 310	3
HPER 160	2	Fine Arts Elective	3
*Elective	3	Elective	3
	16	Educ 200 Expl. Field Exp.	1
			16

\*Foreign language is recommended.

## SUGGESTED ORDER OF STUDY

### 1st Semester

Course
English 315
Speech 100 or 102
English 331 or 332
Education 422
Social Science Elective
English Elective

Hours
3
3
3
2
3
3
<u>17</u>

### 2nd Semester

Course	Hours
English 319	3
Education 330	2
Educ 331 Video Teaching Lab	1
Political Science 120	3
English Elective	3
Elective	<u>5</u>
	17

### SENIOR

English Electives
Electives

9	Education 462	6
6	Education 402	2
	Education 432	2
<u>15</u>	Psychology 412	2
	Educ 370 Instructional Media	2
	Educ 332 Teaching English Secondary School	<u>2</u>
		16

## Suggested Order of Study BACHELOR OF SCIENCE IN EDUCATION MEN'S PHYSICAL EDUCATION MAJOR

### Single Teaching Field

#### 1st Semester

Course	Hours
Eng 101 Composition	3
HPER 160 Personal Health	2
Phys 100 Fundamentals of Physical Science	5
HPER 150 Introduction to Professional Physical Education	2
PSc 120 Government: National, State, Local	3
Psy 120 Freshman Orientation	<u>1</u>
	16

#### 2nd Semester

Course	Hours
Eng 102 Composition	3
Hist 120 U.S. History 1877 to the present or Elective	3
Bio 120 Zoology	5
Psy 110 Psychology of Human Development	<u>5</u>
	16

### SOPHOMORE

Math 110 Introduction to College Math I	3
Eng 120 or 130 World Literature	3
Spch 100 Speech Techniques	3
HPER 251 Fundamentals of Physical Education Activities I	4
Music 110 Music Appreciation or Phil 201 or Art 110 or Dr 110	<u>3</u>
	16

Soc 152 Anthropology	3
Psy 310 Educational Psychology	3
Bio 221 Human Anatomy and Physiology	5
HPER 252 Fundamentals of Physical Education Activities I	4
Educ 200 Exploratory Field Experiences	<u>1</u>
	16

### JUNIOR

Eng 210 or 220 English Literature	3
HPER 370 School and Community Health	3
HPER 310 Elementary School Physical Education Programs	3
HPER 351 Theory of Football	3
HPER 331 Theory and Analysis of Selected Team Sports	2
Swimming	<u>1</u>
	15

Educ 330 Structure of Teaching	2
Educ 331 Video Teaching	1
HPER 312 Teaching Elementary School Physical Education	2
HPER 342 Kinesiology	3
HPER 350 Theory of Basketball	2
HPER 352 Theory of Spring Sports	2
Elective	<u>3</u>
	15



## SUGGESTED ORDER OF STUDY

### 1st Semester

### 2nd Semester

#### SENIOR

Course	Hours	Course	Hours
HPER 410 History and Philosophy of Physical Education	3	Educ 330 Instructional Media	2
HPER 470 Administration of Physical Education	3	Educ 338 Teaching P.E. Secondary School	2
HPER 470 Administration of Physical Education	3	Psy 412 Measurement and Evaluation	2
HPER 450 Care and Prevention of Injuries or HPER 220 First Aid or HPER 230 Safety	3	Educ 402 History and Philosophy of Education	2
HPER 431 Administration of the Interscholastic Programs	3	Educ 442 Critical Issues in Education	2
Electives	<u>3</u>	Educ 444 Student Teaching (Elementary) (3)	3
	15	Educ 464 Student Teaching or (Secondary) (3)	3
		Educ 462 Student Teaching Secondary	<u>6</u>
			16

### Suggested Order of Study BACHELOR OF SCIENCE IN EDUCATION WOMEN'S PHYSICAL EDUCATION MAJOR

### 1st Semester

### Single Teaching Field

### 2nd Semester

#### FRESHMAN

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Hist 110 U.S. History 1492-1877	3	Bio 120 Zoology	5
Phys 100 Fundamentals of Physical Science	5	Psy 110 Psychology of Human Development	5
HPER 150 Introduction to Professional Physical Education	2	HPER 160 Personal Health	<u>2</u>
PSc 120 Government: National, State, Local	3		15
Psy 120 Freshman Orientation	<u>1</u>		
	17		

#### SOPHOMORE

Math 110 Introduction to College Math I	3	Soc 152 Anthropology	3
Spch 100 Speech Techniques	3	Psy 310 Educational Psychology	3
Eng 120 or 130 World Literature	3	Bio 221 Human Anatomy and Physiology	5
HPER 251 Fundamentals of Physical Education Activities I	4	HPER 252 Fundamentals of Physical Education Activities I	4
Music 110 Music Appreciation or Phil 201 or Dr 110 or Art 110	<u>3</u>	Educ 200 Exploratory Field Experience	<u>1</u>
	16		16

#### JUNIOR

Eng 210 or 220 English Literature	3	Educ 330 Structure of Teaching	5
HPER 370 School and Community Health	3	HPER 312 Teaching Elementary School Physical Education	2
HPER 321 Theory and Analysis of Selected Team Sports	3	HPER 342 Kinesiology	4
HPER 310 Elementary School Physical Education	3	HPER 332 Rhythmic Form and Analysis	2
Swimming	1	HPER 322 Theory and Analysis of Selected Individual Sports	<u>3</u>
Elective	<u>2</u>		16
	15		

## SUGGESTED ORDER OF STUDY

1st Semester		2nd Semester	
SENIOR			
Course	Hours	Course	Hours
HPER 410 History and Philosophy of Physical Education	3	PROFESSIONAL SEMESTER	
HPER 470 Organization and Administration of Physical Education	3	Educ 338 Teaching P.E. Secondary School	2
HPER 450 Care and Prevention of Injuries or HPER 220 First Aid	3	Educ 370 Instructional Media	2
HPER 431 Administration of the Interscholastic Programs	3	Psy 412 Measurement and Evaluation	3
Elective	3-4	Educ 402 History and Philosophy of Education	3
	15-16	Educ 432 Critical Issues in Education	3
		Educ 444 Student Teaching (Elementary) (3)	(3)
		Educ 464 Student Teaching or (Secondary) (3)	(3)
		Educ 462 Student Teaching Secondary	6
			16

## Suggested Order of Study BACHELOR OF SCIENCE IN EDUCATION SOCIAL SCIENCE MAJOR

1st Semester		History Emphasis		2nd Semester	
FRESHMAN					
Course	Hours	Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3		
Psy 110 Human Development	5	Hist 120 U. S. History 1877 to Present	3		
Hist 110 U.S. History 1492-1877	3	Art 110 Intro to Art or Music 110 Music			
Math 110 Intro to College Math	3	Appreciation or Drama 110 Theatre			
HPER 101 Intro to Phys Act I	1	Appreciation or Phil 201 Intro to			
Psy 120 Freshman Orientation	1	Philosophy	3		
	16	PSc 120 Government: National, State, Local	3		
		Hist 200 Western Civ to 1500	3		
		HPER 102 Intro to Physical Activities	1		
			16		

SOPHOMORE			
Phys Sc 100 Fund of Phys Sc or any 5 hour course in Chem or Phys	5	Eng 210 or 220 English Literature	3
Eng 120 or 130 Masterpieces of World Lit	3	*Bio 100 General Biology or any 5 hour course in Biology	5
Educ 200 Exploratory Field Experience	1	Hist 201 or 202 Modern Europe	3
Soc 110 Intro to Sociology	3	Geo 211 Regions and Nations or Geo 222 Economic Geography	3
HPER 160 Personal Health	2	Spch 100 Speech Techniques	3
HPER 102 Introduction to Phys Act	1		17
	15		

JUNIOR			
Econ 201 Principles of Economics	3	Upper Level History	6
Upper Level Social Science Elective	3	Ed 330 Structures of Teaching	2
Upper Level History	6	Ed 331 Video Teaching Lab	1
Psy 310 Educational Psychology	3	Social Science Electives	8
	15	(It is recommended that the student have upper level courses in all the areas of Social Science, that is, Hist, Pol. Sc, Geo, and Soc)	
			17

SENIOR			
Professional Semester	16	Upper Level History	6
		Social Science Electives	9
			15

\*It is recommended that Sociology majors register for Biology 120 or Biology 202.



SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE IN EDUCATION  
SOCIAL SCIENCE MAJOR**

**Political Science Emphasis**

**1st Semester**

**2nd Semester**

**FRESHMAN**

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Psy 110 Human Development	5	Hist 120 History 1877 to Present	3
Hist 110 U.S. History 1492-1877	3	Art 110 Intro to Art or Music 110 Music	
Math 110 Intro to College Math	3	Appreciation or Drama 110 Theatre	
HPER 101 Intro to Phys Act I	1	Appreciation or Phil 201 Intro to	
Psy 120 Freshman Orientation	1	Philosophy	3
	<u>16</u>	PSc 120 Government: National, State, Local	3
		Hist 200 Western Civ to 1500	3
		HPER 102 Introduction to Phys Activities	1
			<u>16</u>

**SOPHOMORE**

Phys Sc 100 Fund of Phys Sc or any 5 hour course in Chem or Phys	5	Eng 210 or 220 English Literature	3
Eng 120 or 130 Masterpieces of World Lit	3	Bio 100 General Biology or any 5 hour course in Biology	5
Soc 110 Intro to Sociology	3	European His 201 or 202 Modern Europe	3
Spch 100 Speech Tech or Spch 211		Geo 211 Regions and Nations or Geo 222	
Discussion Techniques	3	Economic Geography	3
Elective	2	HPER 160 Personal Health	2
	<u>16</u>	Educ 200 Exploratory Field Experience	1
			<u>17</u>

**JUNIOR**

Econ 202 Principles of Economics	3	Upper Level Political Science	6
Upper Level U.S. History	3	Ed 330 Structures of Teaching	2
Upper Level Political Science	6	Ed 331 Video Teaching Lab	1
Psy 310 Educational Psychology	3	Social Science Electives	8
	<u>15</u>	(It is recommended that the student have upper level courses in all areas of Social Science, that is, Hist, Pol Sc, Geo, and Soc)	
			<u>17</u>

**SENIOR**

Professional Semester	16	Upper Level Political Science	3
		Upper Level European History	3
		Upper Level Elective Hours	9
		(Attention should be given to the elec- tives so that the student may have a supporting area.)	
			<u>15</u>

# SUGGESTED ORDER OF STUDY

## BACHELOR OF SCIENCE IN EDUCATION SOCIAL SCIENCE MAJOR

### Sociology Emphasis

#### 1st Semester

#### 2nd Semester

#### FRESHMAN

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Psy 110 Human Development	5	Hist 120 History 1877 to Present	3
Hist 110 U.S. History 1492-1877	3	Art 110 Intro to Art or Music 110 Music	
Math 110 Intro to College Math	3	Appreciation or Drama 110 Theatre	
HPER 101 Intro to Physical Activities I	1	Appreciation or Phil 201 Intro to	
Psy 120 Freshman Orientation	1	Philosophy	3
	<u>16</u>	PSc 120 Government: National, State, Local	3
		Hist 200 Western Civ to 1500	3
		HPER 102 Intro to Physical Activities	<u>1</u>
			16

#### SOPHOMORE

Phys Sc 100 Fund of Phys Sc or any 5 hour course in Chem or Phys	5	Eng 210 or 220 English Lit	3
Eng 120 or 130 Masterpieces of World Lit	3	*Bio 100 General Biology or any 5 hour course in Biology	5
Soc 110 Intro to Sociology	3	Hist 201 or 202 Modern Europe	3
Spch 100 Speech Tech or Spch 211		Geo 211 Regions and Nations or Geo 222	
Discussion Tech	3	Economic Geography	3
Elective	2	HPER 160 Personal Health	2
	<u>16</u>	Educ 200 Exploratory Field Experience	<u>1</u>
			17

#### JUNIOR

Econ 201 Principles of Economics	3	Upper Level Electives in Sociology	6
Upper Level United States History	3	Upper Level Elective	3
Upper Level Electives in Sociology	6	Ed 330 Structures of Teaching	5
Psy 310 Educational Psychology	3	Social Science Elective	3
	<u>15</u>	(It is recommended that the student have upper level courses in all areas of Social Science, that is, Hist, Pol Sc, Geo, and Soc)	
			<u>17</u>

#### SENIOR

Professional Semester	16	Upper Level Elective in Sociology	3
		Upper Level European History	3
		Upper Level Electives in Sociology	<u>9</u>
			15

\*It is recommended that Sociology majors register for Biology 120 or Biology 202.



SUGGESTED ORDER OF STUDY  
BACHELOR OF SCIENCE IN EDUCATION  
SPEECH AND DRAMA MAJOR

Drama Emphasis  
Plan B—Single Teaching Field

1st Semester

2nd Semester

FRESHMAN

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
His 110 U.S. History 1492-1877 or His 120 U.S. History 1877-Present	3	Bio 100 General Biology	5
Spch 100 Speech Techniques	3	Psy 110 Psychology of Human Development	5
Dr 121 Theatre Lab	1	HPER 102 Intro to Physical Activities II	1
Dr 110 Theatre Appreciation	3	Dr 122 Theatre Lab	1
Psy 120 Orientation	1		15
HPER 101 Introduction to Physical Activities I	1		
	15		

SOPHOMORE

Math 110 Intro. to College Math I	3	Spch 212 Oral Interpretation	3
Dr 221 Theatre Lab	1	Dr 222 Theatre Lab	1
Art 100 Art Composition (elect)	3	Psy 310 Educational Psychology	3
Eng 120-130 Word Masterpieces	3	Phys 100 Intro to Physical Science	5
PSc 120 Government: National, State, Local	3	Eng 210-220 English Literature	3
His 200 Western Civilization-1500	3		15
	16		

JUNIOR

Spch 300 Speech Composition	3	Dr 332 Development of Drama	3
Dr 331 Development of Drama	3	Dr 362 Stage Costume and Design	3
Dr 341 Beginning Acting	3	Dr 372 Directing for Stage	3
Dr 351 Play Production	3	Electives	3
Dr 321 (elect) Theatre Lab	1	Ed 330 Structures of Teaching	2
Elective	3	Ed 331 Video Teaching Lab	1
	16		15

SENIOR

HPER 160 Personal Health	2	Professional Education Semester	16
Dr 431 Creative Dramatics	3		
Dr 441 Stage Design	3		
Spch 411 Seminar-Studies in Discussion	3		
Electives	6		
	17		

For Plan A (teaching two subjects) student follows the above but is not required to take Sp 300, Dr 431, and 3 hours of Theatre Laboratory.

# SUGGESTED ORDER OF STUDY

## BACHELOR OF SCIENCE IN EDUCATION SPEECH AND DRAMA MAJOR

### Speech Emphasis Plan B—Single Teaching Field

#### 1st Semester

#### 2nd Semester

#### FRESHMAN

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
His 110 U.S. History 1492-1877 or His 120 U.S. History 1877-Present	3	Bio 100 General Biology	5
Eng 120-130 World Masterpieces	3	Psy 110 Psychology of Human Development	5
Spch 121 Forensics Workshop	1	Spch 122 Forensic Workshop	1
Spch 101 Argumentation and Debate	3	Spch 100 Speech Techniques	3
HPER 101 Intro to Physical Activities I	1		17
Psy 120 Orientation	1		
	<u>15</u>		

#### SOPHOMORE

Math 110 Intro to College Math I or Math 130 College Algebra	3	HPER 160 Personal Health	2
Spch 221 Forensic Workshop	1	Psy 310 Educational Psychology	3
Eng 210-220 English Literature	3	Phys 100 Intro to Physical Science	5
PSc 120 Government: National, State, Local	3	His 200 Western Civilization to 1500	3
Dr 110 Theatre Appreciation	3	HPER 102 Intro to Physical Activities II	1
Spch 210 Discussion Techniques	3	Ed 200 Exploratory Field Experiences	1
	<u>16</u>	Spch 222 Forensics Workshop	1
			16

#### JUNIOR

Spch 300 Speech Composition	3	Spch 102 Public Speaking	3
Spch 310 Business and Professional Speech	3	Dr 332 Development of Drama	3
Spch 321 (elect) Forensic Workshop	1	Spch 322 (elect) Forensics Workshop	1
Dr 331 Development of the Drama	3	Electives	5
Spch 131 Voice and Articulation	3	Ed 330 Structures of Teaching	2
Electives	3	Ed 331 Video Teaching Lab	1
	<u>16</u>		15

#### SENIOR

Spch 311 Public Address	3	Professional Education Semester	16
Spch 411 Seminar—Studies in Dis.	3		
Spch 421 Forensic Workshop	1		
Electives	5		
Dr 351 Play Production	3		
	<u>15</u>		

For Plan A (teaching two subjects) student follows the above excluding Sp 300, Sp Cor 131; 1 hr. of Forensics Workshop.



SUGGESTED ORDER OF STUDY  
**ASSOCIATE OF ARTS DEGREE**  
**Pre-Engineering**  
**PRE-ENGINEERING**

[Freshman Year Only]

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Math 150 Calculus and Analytic Geometry I	5	Math 250 Calculus and Analytic Geometry II	5
Chem 101 General Chemistry I	5	Chem 102 General Chemistry II	3
*Draf 110 Introductory Drafting	3	*Draf 120 Descriptive Geometry	3
HPER 101 Intro to Physical Activities I	1	Phys 250 General Physics I	5
Psy 120 Freshman Orientation	1	or	
	18	**Chem 162 Qualitative Analysis	3
		General Education	3
			17 to 19

\*Required of civil and mechanical engineers. Student should check catalog of the College to which he expects to transfer for requirements in this area.

\*\*Chemical Engineers must choose Chem 162 instead of Phys 250 and choose 3 to 5 hours of General Education requirements.

**Suggested Order of Study**  
**ASSOCIATE OF SCIENCE**  
**ACCOUNTING MAJOR**

1st Semester		2nd Semester	
FIRST YEAR			
Course	Hours	Course	Hours
Eng 101 Composition .	3	Psy 100 General Psychology	3
Acct 101 Elementary Accounting I	3	Acct 102 Elementary Accounting II	3
GB 101 Introduction to Business	3	Spch 100 Speech Techniques	3
GB 121 Office Machines	3	OA 102 Intermediate Typewriting	3
Math 20-30 Beg. and Inter. Algebra (or Math 110)	3	PSc 120 Government: National, State, Local	3
HPER 101 Into to Physical Activities I	1	HPER 102 Intro to Physical Activities II	1
Psy 120 Freshman Orientation	<u>1</u>		<u>16</u>
	17		
SECOND YEAR			
Natural Science	5	Econ 202 Principles of Economics	3
Econ 201 Principles of Economics	3	MM 350 Business Org. and Management	3
Acct 212 Intermediate Accounting	3	Acct 401 Tax Accounting	3
Acct 211 Cost Accounting	3	Humanities or Fine Arts	3
GB 301 Business Law	<u>3</u>	Elective in Business	<u>3</u>
	17		15

**Suggested Order of Study**  
**ASSOCIATE OF SCIENCE**  
**AUTOMOTIVE TECHNOLOGY MAJOR**

1st Semester		2nd Semester	
FIRST YEAR			
Course	Hours	Course	Hours
Auto 100 Automotive Engines	5	Auto 120 Automotive Electrical and Emission Control	5
Math 20-30 Beginning and Intermediate Algebra	3	Auto 110 Technical Mathematics	3
Eng 101 Composition	3	Draf 110 Introductory Drafting	3
Phy 100 Physical Science	5	Psy 100 General Psychology	3
Psy 120 Freshman Orientation	1	Spch 100 Speech Techniques	3
	17		17

**SUGGESTED ORDER OF STUDY**

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Auto 200 Automotive Chassis, Brakes and Transmissions	5	Auto 250 Automotive Body and Paint	5
Auto 220 Automotive Refrigeration and Air Conditioning	3	Auto 260 Automotive Service Management	5
Auto 190 Technical Science	4	Hist 110 United States History 1492-1877	3
Auto 130 Automotive Business Management	3	Fine Arts Elective	3
HPER 160 Personal Health	2		16
	17		

**Suggested Order of Study  
ASSOCIATE OF SCIENCE  
COMPUTER PROGRAMMING MAJOR**

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composition	3	PSc 120 Government: National, State, Local	3
Math 140 Algebra and Trigonometry	5	GB 220 Business Communications	3
Acct 101 Elementary Accounting I	3	Acct 102 Elementary Accounting II	3
Comp 100 Basic Computing Machines	3	Comp 120 Introduction to Programming	3
Comp 110 Key-Punch Operation	3	Spch 100 Speech Techniques	3
Psy 120 Freshman Orientation	1	HPER 101 Intro to Physical Activities I	1
	18		16

**SECOND YEAR**

Phys 100 Fundamentals of Physical Science	5	Comp 150 Computer Machines and Machine Language	3
Acct 211 Cost Accounting (or Acct 212)	3	Comp 200 Systems Development and Design	3
Econ 201 Principles of Economics	3	Econ 202 Principles of Economics	3
Comp 130 Advanced Programming	3	GB 321 Statistics	3
Comp 140 Data Processing Applications	3	Psy 100 General Psychology	3
HPER 102 Intro to Physical Activities II	1	Eng 120 World Masterpieces	3
	18		18

**Suggested Order of Study  
ASSOCIATE OF SCIENCE  
COMPUTING ANALYSIS MAJOR**

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Eng 101 English Composition	3	Comp 130 Advanced Programming	3
Math 150 Calculus & Analytical Geometry I	5	Math 250 Calculus & Analytical Geometry II	5
Comp 120 Introduction to Programming	3	Phys 250 General Physics I	5
Psy 100 General Psychology	3	Comp 140 Data Processing Applications	3
PSc 120 Government: National, State, Local	3	HPER 101 Physical Activity	1
Psy 120 Freshman Orientation	1		17
	18		

**SECOND YEAR**

Math 260 Calculus & Analytical Geometry III	5	Math 322 Differential Equations	3
Phys 260 General Physics II	5	Math 431 Numerical Analysis	3
Comp 150 Computer Machines	3	Comp 220 Analog Computers	3
Phys 272 Statics	3	Spch 100 Speech Techniques	3
HPER 102 Physical Activity	1	Math 361 Problems and Statistics	3
	17	Eng 120 World Masterpieces	3
			18



# SUGGESTED ORDER OF STUDY

## ASSOCIATE OF SCIENCE COSMETOLOGY

### 1st Semester

Course	Hours
Eng 101 Composition	3
Psy 100 General Psychology	3
GB 110 Business Mathematics	3
HPER 160 Personal Health	2
Psy 120 Freshman Orientation	1
Cos 100 Introduction to Cosmetology	5
	<u>17</u>

### FIRST YEAR

### 2nd Semester

Course	Hours
GB 101 Introduction to Business	3
Math 20-30 Beginning & Intermediate Algebra	3
Bio 100 General Biology	5
Cos 110 Theory and Practice of Cosmetology	5
	<u>16</u>

### SUMMER

Cos 120 Cosmetology Practice & Procedures 5

### SECOND YEAR

Acct 101 Elementary Accounting	3
Spch 100 Speech Techniques	3
Hist 110 United States History	3
Econ 202 Principles of Economics	3
Cos 200 Advanced Theory and Practice of Cosmetology	5
	<u>17</u>

Art 132 Introduction to Design	3
GB 220 Business Communication	3
Psy 221 Psychology of Personal Adjustment	3
MM 350 Business Organization and Management	3
Cos 210 Wig Training and Cosmetic Applications	5
	<u>17</u>

## Suggested Order of Study ASSOCIATE OF SCIENCE

### ELECTRONIC DATA PROCESSING COORDINATION

#### 1st Semester

Course	Hours
Eng 101 Composition	3
Math 130 College Algebra	3
Acct 101 Elementary Accounting I	3
Comp 100 Basic Computing Machines	3
GB 101 Introduction to Business	3
HPER 101 Intro to Physical Activities I	1
Psy 120 Freshman Orientation	1
	<u>17</u>

#### FIRST YEAR

#### 2nd Semester

Course	Hours
PSc 120 Government: National, State, Local	3
Acct 102 Elementary Accounting II	3
Comp 110 Key-Punch Operation	3
OA 102 Intermediate Typewriting	3
OA 120 Intermediate Shorthand	3
HPER 102 Intro to Physical Activities II	1
	<u>16</u>

### SECOND YEAR

Psy 100 General Psychology	3
Comp 120 Introduction to Programming	3
GB 321 Statistics	3
OA 200 Advanced Typewriting	3
Econ 201 Principles of Economics	3
Eng 120 World Masterpieces	3
	<u>18</u>

Bio 100 General Biology	5
Spch 100 Speech Techniques	3
Comp 130 Advanced Programming	3
GB 220 Business Communications	3
GB 121 Office Machines	3
	<u>17</u>

## Suggested Order of Study ASSOCIATE OF SCIENCE DRAFTING AND DESIGN MAJOR

#### 1st Semester

Course	Hours
Draf 110 Introductory Drafting	3
Eng 101 Composition	3
Art 110 Introduction to Art	3
Psy 100 General Psychology	3
Math 20-30 Beginning and Intermediate Algebra (or Math 130)	3
HPER 101 Intro to Physical Activities I	1
Psy 120 Freshman Orientation	1
	<u>17</u>

#### FIRST YEAR

#### 2nd Semester

Course	Hours
Draf 120 Descriptive Geometry	3
Draf 130 Machine Drafting	3
Spch 100 Speech Techniques	3
Auto 110 Technical Math	3
Elective	3
HPER 102 Intro to Physical Activities II	1
	<u>16</u>

## SUGGESTED ORDER OF STUDY

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Phys 100 Physical Science	5	Mach 100 Introduction to Machine	
Art 132 Introduction to Design	3	Tool Processes	5
Econ 202 Principles of Economics (or		Draf 210 Production Illustration	3
Introduction to Business, GB 101)	3	Draf 220 Architectural Drafting	3
Draf 200 Machine Design	3	PSc 120 Government: National, State, Local	3
Draf 230 Electrical and Pipe Drafting	3	Electives	3
	17		17

### Suggested Order of Study ASSOCIATE OF SCIENCE ENVIRONMENTAL HEALTH

Course	Hours
Prescribed 36 week course at Water and Waste Water School	30

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Chem 101 General Chemistry	5	Chem 102 General Chemistry	3
Bio 120 General Zoology	5	Bio 312 Environmental Biology	3
Math 140 Algebra and Trigonometry	5	Bio 314 Environmental Biology Laboratory	2
Psy 120 Orientation	1	Eng 101 Composition	3
HPER 101 Physical Education	1	Hist 110 History of U.S.	3
	17	Humanities Elective	3
		HPER 102 Physical Education	1
			18

Course	Hours
Psy 100 General Psychology	3
Spch 100 Fundamentals of Speech	3
	6

### Suggested Order of Study ASSOCIATE OF SCIENCE ENVIRONMENTAL HEALTH

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Chem 101 General Chemistry	5	Chem 102 General Chemistry	3
Bio 120 General Zoology	5	Bio 211 Microbiology	5
Math 140 Algebra and Trigonometry	5	Eng 101 Composition	3
Psy 120 Orientation	1	Hist 110 History of U.S.	3
HPER 101 Physical Education	1	Humanities Elective	3
	17	HPER 102 Physical Education	1
			18

Course	Hours
Psy 100 General Psychology	3
Spch 100 Fundamentals of Speech	3
	6

Course	Hours
Prescribed 36 week course at Water and Waste Water School	30



**SUGGESTED ORDER OF STUDY**  
**ASSOCIATE OF SCIENCE**  
**GENERAL BUSINESS MAJOR**

**1st Semester**

**2nd Semester**

**FIRST YEAR**

Course	Hours	Course	Hours
Eng 101 Composition	3	Hist 110 U.S. History 1492-1877	3
Acct 101 Elementary Accounting I	3	Acct 102 Elementary Accounting II	3
GB 101 Introduction to Business	3	OA 102 Intermediate Typewriting	3
Math 20-30 Beginning and Intermediate Algebra (or Math 110)	3	Spch 100 Speech Techniques	3
GB 110 Business Mathematics	3	Eng 120 Masterpieces of World Literature	3
HPER 101 Intro to Physical Activities I	1	HPER 102 Intro to Physical Activities II	1
Psy 120 Freshman Orientation	<u>1</u>		<u>16</u>
	<u>17</u>		

**SECOND YEAR**

Econ 201 Principles of Economics	3	Natural Science	5
GB 220 Business Communications	3	Econ 202 Principles of Economics	3
MM 300 Principles of Marketing	3	GB 302 Business Law	3
GB 301 Business Law	3	MM 350 Business Organization and Management	3
Psy 100 General Psychology	3	Electives	<u>3</u>
	<u>15</u>		<u>17</u>

**Suggested Order of Study**  
**ASSOCIATE OF SCIENCE**  
**LAW ENFORCEMENT MAJOR**

**1st Semester**

**2nd Semester**

**FIRST YEAR**

Course	Hours	Course	Hours
Eng 101 Composition	3	Math 110 Intro to College Math I	3
PSc 120 Government: National, State, Local	3	Psy 100 General Psychology	3
Soc 110 Intro to Sociology	3	Phys 100 Fundamentals of Physical Science	5
HPER 160 Personal Health	2	Soc 212 Social Problems	3
LE 100 Intro to Law Enforcement	3	LE 150 Interview and Report Writing	2
LE 110 Police Organization and Administration	2		<u>16</u>
Psy 120 Freshman Orientation	<u>1</u>		
	<u>17</u>		

**SUMMER**

Course	Hours
LE 190 Supervised Police Work	6

**SECOND YEAR**

Spch 100 Speech Techniques	3	Hist 110 U.S. History 1492-1877	3
Soc 322 Criminology	3	Soc 412 Juvenile Delinquency	3
LE 200 Criminal Investigations	3	HPER 220 First Aid	2
LE 210 Criminal Procedures	3	LE 250 Criminal Law	3
Psy 221 Psychology of Personal Adjustment	3	LE 290 Supervised Police Work II	3
	<u>15</u>	Eng 120 Masterpieces of World Literature	<u>3</u>
			<u>17</u>

# SUGGESTED ORDER OF STUDY

## ASSOCIATE OF SCIENCE MACHINE TECHNOLOGY MAJOR

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Math 130 College Algebra	3	Mach 150 Technical Mathematics	3
Eng 101 Composition	3	Mach 160 Process Instrumentation	3
Draf 101 Introductory Drafting	3	Draf 130 Machine Drafting	3
Mach 100 Intro to Machine Tool Activities	5	Mach 110 Advanced Machine Tool Processes	5
HPER 101 Intro to Physical Activities I	1	HPER 102 Intro to Physical Activities II	1
Psy 120 Freshman Orientation	<u>1</u>		<u>15</u>
	16		

### SECOND YEAR

Hist 110 U.S. History 1492-1877	3	Spch 100 Speech Techniques	3
Phys 100 Fundamentals of Physical Science	5	Mach 230 Jig and Fixture Production	3
Mach 100 Fundamentals of Cutting Tools	5	Mach 260 Fundamentals of Metallurgy	3
Mach 220 Tool and Die Production	3	Mach 250 Numerical Control Machining	3
	<u>16</u>	Psy 100 General Psychology	<u>3</u>
			15

## Suggested Order of Study ASSOCIATE OF SCIENCE NURSING MAJOR

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Bio 221 Human Anatomy and Physiology	5	Chem 100 Introductory Chemistry	5
Eng 101 Composition	3	Nurs 120 Nursing in Physical Illness I	9
Soc 110 Introduction to Sociology	3	HPER 102 Intro to Physical Activities II	1
Nurs 100 Fundamentals of Nursing	5	Psy 100 General Psychology	<u>3</u>
HPER 101 Intro to Physical Activities I	1		18
Psy 120 Freshman Orientation	<u>1</u>		
	18		

### SUMMER

Course	Hours
Nurs 130 Nursing in Mental Illness	4

### SECOND YEAR

Bio 231 Fundamentals of Medical Microbiology	5	PSc 120 Government: National, State, Local	3
Nurs 210 Maternal and Child Health	9	Spch 100 Speech Techniques	3
Fine Arts Elective	<u>3</u>	Nurs 240 Nursing In Physical Illness II	<u>9</u>
	17		15

## Suggested Order of Study ASSOCIATE OF SCIENCE RADIOLOGIC TECHNOLOGY

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Bio 221 Human Anatomy and Physiology	5	Math 20-30 Beginning and Intermediate Algebra or Math 130 College Algebra	3
Rad 101 Introduction to Radiology	3	Psy 100 General Psychology	3
Rad 170 Radiologic Physics I	3	Rad 132 Principles of Radiographic Exposure	3
Rad 142 Radiographic Positioning I	3	Rad 152 Osteology	3
Psy 120 Freshman Orientation	1	Rad 241 Radiographic Positioning II	3
HPER 101 Physical Education	<u>1</u>	HPER 102 Physical Education	<u>1</u>
	16		16



## SUGGESTED ORDER OF STUDY

### \*SUMMER

Course	Hours
Rad 160 Film Critique	2
Rad 180 Practicum in Radiology I	5
Rad 271 Radiologic Physics II	3
	<u>10</u>

### 1st Semester

Course	Hours
Chem 100 Introductory Chemistry	5
Eng 101 Composition	3
Psy 221 Psychology of Personal Adjustment	3
Rad 111 Medical Terminology	5
Rad 121 Patient Care and Special Techniques	3
	<u>19</u>

### SECOND YEAR

### 2nd Semester

Course	Hours
Hist 110 History of the U.S.	3
Spch 100 Speech Techniques	3
Rad 252 Radiographic Positioning	3
Rad 282 Practicum in Radiology II	3
OA 101 Elementary Typing	3
Humanities Elective	3
	<u>18</u>

### \*SUMMER

Rad 290 Practicum in Radiology II	5
Rad 299 Advanced Radiology	3
	<u>8</u>

\*Summer classes meet a minimum of 14 weeks.

### THIRD YEAR

3 months advanced practicum

## Suggested Order of Study ASSOCIATE OF SCIENCE SECRETARIAL SCIENCE

### 1st Semester

Course	Hours
Eng 101 Composition	3
OA 111 Elementary Shorthand	3
OA 102 Intermediate Typewriting	3
GB 101 Introduction to Business	3
Math 20-30 Beginning and Intermediate Algebra (or Math 110)	3
HPER 101 Intro to Physical Activities I	1
Psy 120 Freshman Orientation	1
	<u>17</u>

### 2nd Semester

### FIRST YEAR

Course	Hours
Hist 110 U.S. History 1492-1877	3
Spch 100 Speech Techniques	3
OA 120 Intermediate Shorthand	3
OA 200 Advanced Typewriting	3
Eng 120 Masterpieces of World Literature	3
HPER 102 Intro to Physical Activities II	1
	<u>16</u>

### SECOND YEAR

Acct 101 Elementary Accounting I	3	Bio 100 General Biology	5
GB 121 Office Machines	3	GB 220 Business Communications	3
Psy 100 General Psychology	3	OA 230 Secretarial Procedures	3
Econ 201 Principles of Economics	3	GB 301 Business Law	3
OA 210 Advanced Shorthand	3	OA 220 Dictation and Transcription	3
	<u>15</u>		<u>17</u>

## Required Order of Study SECRETARIAL-TYPIST CERTIFICATE

### ONE-YEAR SCHEDULE

### 1st Semester

Course	Hours
Spch 100 Speech Techniques	3
Eng 101 Composition	3
GB 101 Introduction to Business	3
GB 110 Business Mathematics	3
OA 210 Advanced Shorthand	3
Psy 120 Freshman Orientation	1
	<u>16</u>

### 2nd Semester

Course	Hours
GB 220 Business Communications	3
OA 210 Advanced Shorthand	3
GB 121 Office Machines	3
OA 220 Dictation and Transcription	3
Acct 101 Elementary Accounting I	3
	<u>15</u>



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